DRAFT
AIR QUALITY MANAGEMENT PLAN
1988 REVISION

REVISED DRAFT APPENDIX IV-I GROWTH MANAGEMENT PLAN

SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS

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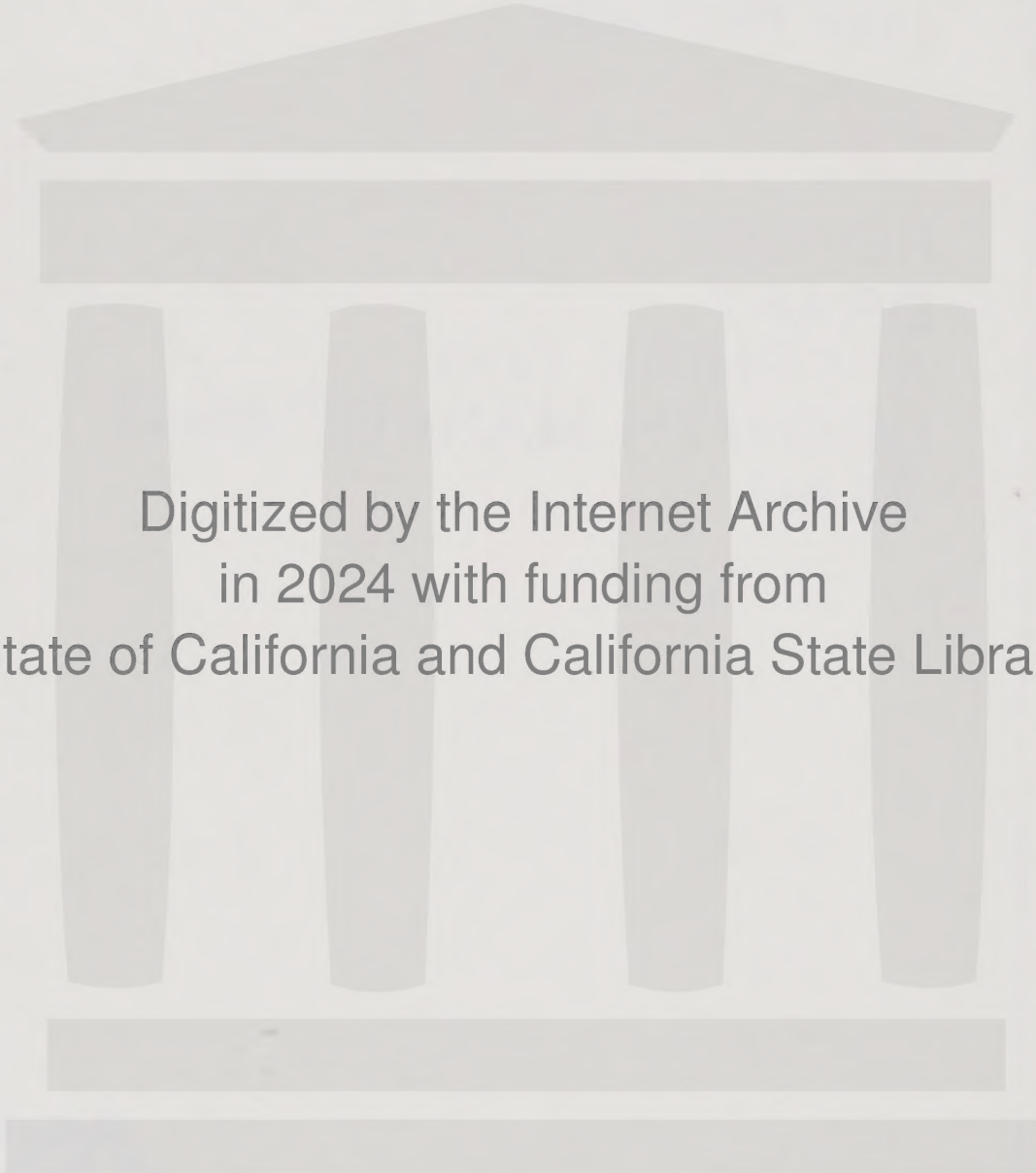

DRAFT GROWTH MANAGEMENT PLAN

October 6, 1988

Growth Management Program
Community & Economic Development Department
Southern California Association of Governments
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CHAPTER I

INTRODUCTION

A. PURPOSES OF THE DRAFT GROWTH MANAGEMENT PLAN

The purposes of this report are:

- To summarize the need for, and describe the purposes and objectives of a **Regional Growth Management Plan.**
- To present management alternatives with numerical job, housing and population target allocations and with alternative strategies, and measures for implementation.[1]
- To provide background information and guidance to facilitate discussion, and refinement of the recommended alternative--GMA-4 Modified Job/Housing Balance Alternative.
- To facilitate discussion, modification, refinement and prioritizing of implementation strategies and measures.

B. BACKGROUND

In 1982, SCAG adopted the SCAG-82 Growth Forecast Policy. This forecast was based on the 1980 Census and forecast to the year 2000. In 1985, as a technical adjustment, SCAG-82 was modified--incorporating 1980-84 trends and extending the forecast to the year 2010. This was adopted as SCAG-82 Modified. In the modification, the fundamental assumptions of the previous forecast were not changed.

The Growth Management Plan process has re-examined the assumptions, culminating in the Baseline Projection. The Baseline projects almost two and a half million more people in the region than the SCAG-82 Modified. The regional projection under Baseline was the basis for the various alternative socio-economic distributions, which lead to the development of the recommended alternative--GMA-4 Modified Job/Housing Balance Alternative.

C. THE GROWTH MANAGEMENT PLAN AS A COMPONENT OF THE REGIONAL STRATEGIC PLAN

The Draft Growth Management Plan is part of the Regional Strategic Plan which is a comprehensive vision for the SCAG region. The Regional Strategic Plan sets broad goals for attaining a strong competitive economy; maintaining a favorable quality of life through assuring adequate housing, mobility, infrastructure and level of services; supporting social/governmental viability, cultural vitality and excellence in education; preserving and protecting the quality of the

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1. To serve also as basis for the preparation of the Draft Environmental Impact Report.

environment; securing individual life style options and choices.

The Regional Strategic Plan provides the framework to integrate and coordinate the different SCAG plans. (Growth Management, Air Quality, Mobility, Water Quality, Housing Needs Assessment, Environmental and Hazardous Waste Plans). It also gives direction to the implementing strategies. The Growth Management Plan, by itself, cannot achieve the above mentioned vision and goals intended for the region. The Growth Management Plan strategies need to be implemented in coordination with the measures proposed in the other various plans to assure consistency in the proposed courses of action and attainment of regional goals.

1. Objectives

The Growth Management Plan's objectives are geared to the objectives of the Regional Strategic Plan which are: to provide a common framework for the development and integration of the major SCAG plans[2]; to depict a vision of the region's demographic, economic, socio-cultural, governmental future; to set goals for the preservation of the environment, quality of life and individual options; to define major contingencies which could disrupt that vision and to develop appropriate prevention and response measures.

2. Caveats

A primary purpose of this Draft Growth Management Plan is to successfully achieve a balanced distribution of future jobs and housing in the region. To achieve this balance, care will have to be paid to the following issues, so that new problems won't be created:

- o Provision of adequate investment and renewal in aging or depressed areas that also happen to be job-rich, and designing a system to assure that the needs of these areas are met.

- o Avoidance of a net job loss in this region which could come about by overly restricting employment growth in certain areas (for example ports or airports).

- o Recognition of changing employment patterns as the economy becomes more "fragmented" (with a larger number of small firms) and implications this has upon local governments' ability to affect these decisions.

- o To avoid impacting built-up communities, redirection of just enough housing growth to already built-up areas to alleviate the problems associated with in-commuting, and only to those areas where infrastructure is adequate to accommodate the added housing units.

- o To the degree possible, achieving a balance, by subregion, of the **type** of jobs with the **price** of housing.

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2. Growth Management, Mobility, Evironmental and Hazardous Waste Plans, and the Regional Housing Needs Assessment.

- Accommodation of a fair share of low and moderate income housing in areas where job growth will be redirected. A coordinated regional growth management system that incorporates the concept of regional fair share reduces the potential for imbalances of social groups and governmental service costs.

- Avoid creation of a system to achieve job/housing balance which is punitive, legally questionable, or excessively burdensome.

It should be noted that we already have a growth management system in place in many areas of the region. Many of the actions proposed in this report are simply a restructuring of some of the measures currently implemented to incorporate a **regional** job/housing balance perspective.

D. ORGANIZATION OF THE REPORT

The Growth Management Plan, compared to previous "Development Guide" reports, emphasizes trends and the implementation of strategies to mitigate the possible negative impacts of projected growth and intervene, where appropriate, to obtain most beneficial growth patterns. The principal thrust of the growth management alternatives is geared to achievement of improved balance of jobs and housing in each subregion. The report contains the following chapters:

I. Introduction
II. Summary of Baseline Projection
III. Summary of Baseline Impacts
IV. Issues and Policies
V. Contingencies
VI. Growth Management Alternatives
VII. Recommended Alternative
VIII. Proposed Implementation Process
IX. Appendices

E. TIMELINE AND STEPS FOR COMPLETION OF FINAL GROWTH MANAGEMENT PLAN

- Presentation of Preliminary Draft Growth Management Plan to SCAG's committees: March 1988.
- Discussion of Preliminary Draft Growth Management Plan: April, May 1988.
- Approval of the Draft Growth Management Plan's Recommended Alternative by the Executive Committee: June 1988.
- Presentation of Draft Growth Management Plan to SCAG's committees: August, September 1988.
- Presentation of the Draft EIR to SCAG's committees: September 1988.
- Discussion of Draft Growth Management Plan: August, September, October, November 1988.
- Presentation of final draft of the Growth Management Plan to committees for adoption: December 1988.

Note that development of the Draft Mobility Plan and the Draft AQMP measures will be proceeding concurrently on related schedules. The Regional Housing Needs Assessment was adopted in June 1988.

CHAPTER II

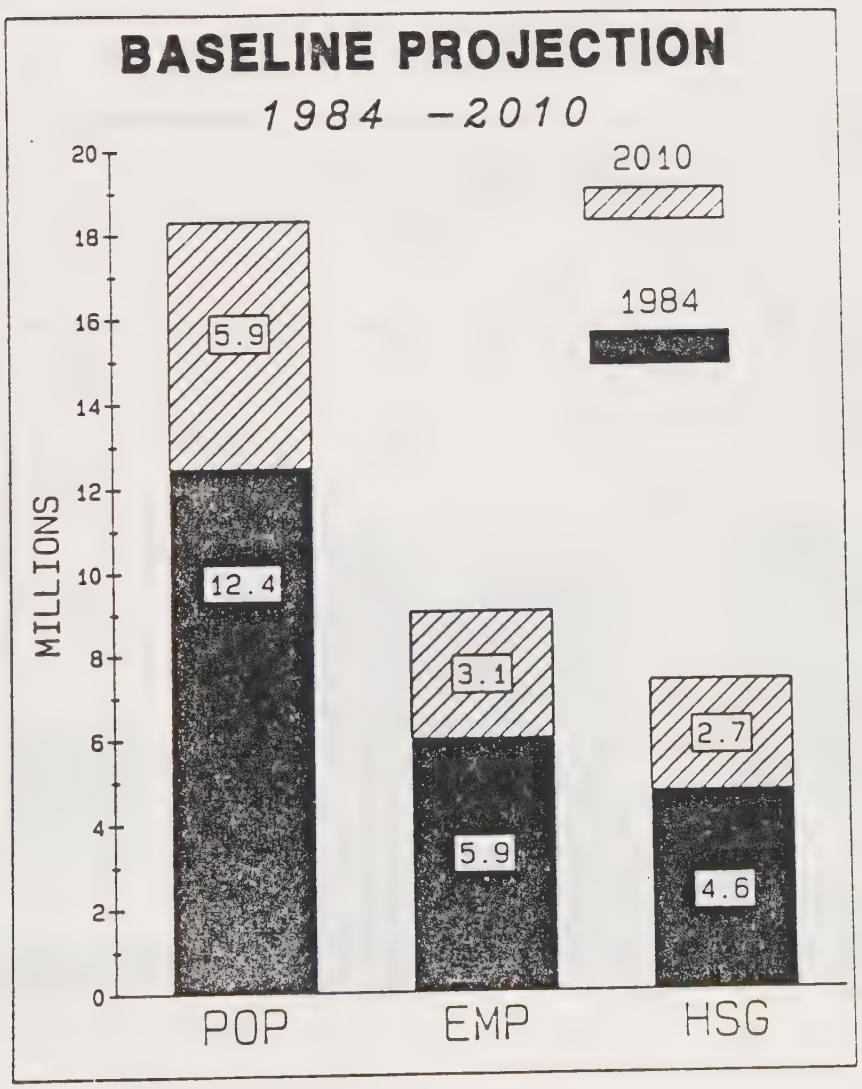
SUMMARY OF THE BASELINE PROJECTIONS

A. REGIONAL BASELINE PROJECTIONS

1. Definition of the Baseline Projection

The Draft Baseline Projection (GMA-1) is a calculation of what the population and employment growth of the SCAG region would be if the demographic and economic forces experienced during the late 1970's and early 1980's continue through the year 2010. The Baseline Projection does reflect the impact of intervention policies currently being implemented--such as adopted growth control ordinances as of 1987--but does not assume any new government intervention with demographic, economic, or housing market trends.

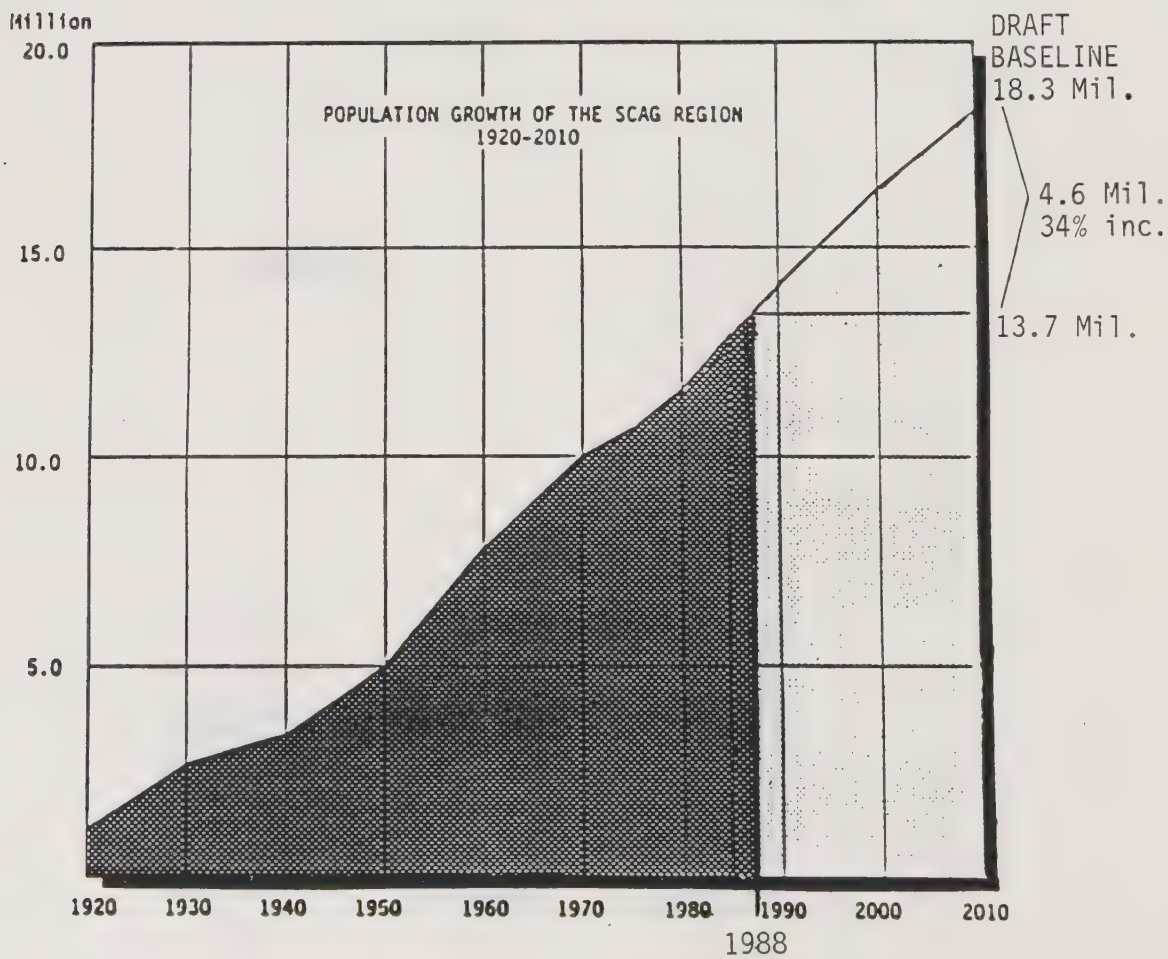
Figure II-1



2. Population Projection

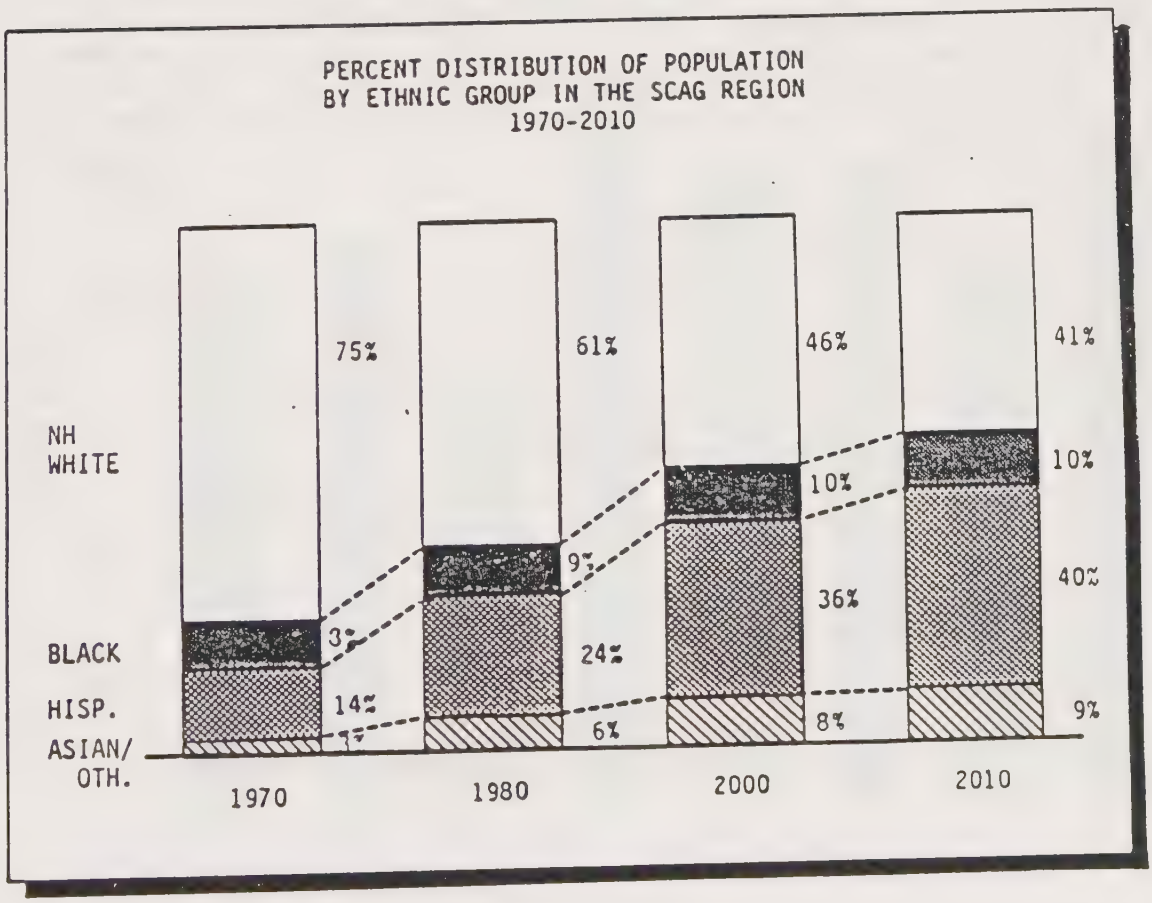
Between 1950 and 1970 the population of the SCAG region, spurred on by rapid economic growth and high levels of migration, doubled in size and grew at a rate of 5% a year. During the recession of the early 1970's the rate of growth slowed down to 1.2% a year but picked up again since 1975. At the time of the 1980 Census the six-county SCAG region was home to 11.6 million people -- second only in population size to the New York Metropolitan area. Since then it grew by another 1.2 million people for an estimate of 12.4 million in 1984 (the base year for the projections). The most recent estimate, as of January 1988, puts the region's total population at 13.7 million. One in every 18 persons in the U.S. now lives in this region. The Baseline Projection shows that by the year 2010 one in every 15 persons in the U.S. will make this region their home, for a total of 18.3 million (See Figure II-2).

Figure II-2



The vigorous projected growth in population is due to an excess of births over deaths (natural increase) and to more people entering than leaving the region (net in-migration). Overall, natural increase represents 63% of the region's population growth over the 30 year period between 1980 and 2010. The largest share of this increase is due to the Hispanic natural increase which is almost five and a half times greater than the Non-Hispanic Blacks and over eight times greater than the Non-Hispanic Whites. Net in-migration, the other component of population change, is the total of domestic gross out-migration, domestic gross in-migration and immigration from abroad (legal and undocumented). Between 1980 and 2010 approximately 9.0 million people are projected to leave the region while 8.1 million are projected to enter from other parts of the United States and 3.3 million are projected to come to this region from other countries. The volume of change indicates a very mobile population. Of those who will reside in the region in 2010, 30% lived in it in 1980, 30% will have been born since, 28% will have moved here from other places in the U.S. and 12% will have moved here from other nations (these figures are approximate and account for outmigration between 1980 and 2010).

Figure II-3



Since 1970 the region has witnessed an influx of immigrants which has contributed to the growth in population and changing ethnic composition. With high rates of immigration both legal and undocumented and high fertility rates, the Hispanic population will be the fastest growing ethnic group between 1980 and the year 2010, increasing from 2.8 to approximately 7.2 million. The Hispanic share of the total population is projected to increase from 24% in 1980 to about 40% by 2010, almost equaling the Non-Hispanic White share of 41% (down from 61% in 1980). The decline in Non-Hispanic White proportion of the total population is attributed to net out-migration and low fertility rates. This group is projected to increase by a little less than half a million for a total population of 7.5 million. The Non-Hispanic Asian/Other ethnic group is projected to increase by 1 million persons between 1980 and 2010 to reach 1.7 million and 9% of the regional total. The Non-Hispanic Black population's share is projected to stay relatively stable at about 10% (See Figure II-3).

The population of the SCAG region is projected to age with time but will remain younger than the nation's population (See Table II-1). The influx of immigrants who are typically young and in the reproductive age groups and the higher fertility rates of the Hispanic population account for a younger age structure of the SCAG region as compared to the nation. The dependency ratio (the ratio of the age group 0-14 and 65+ to the 15-64 age group) in 1980 was .48 and by the year 2010 it is projected to increase to .51. This means that the labor force age group will have to support a greater portion of the population.

Table II-1

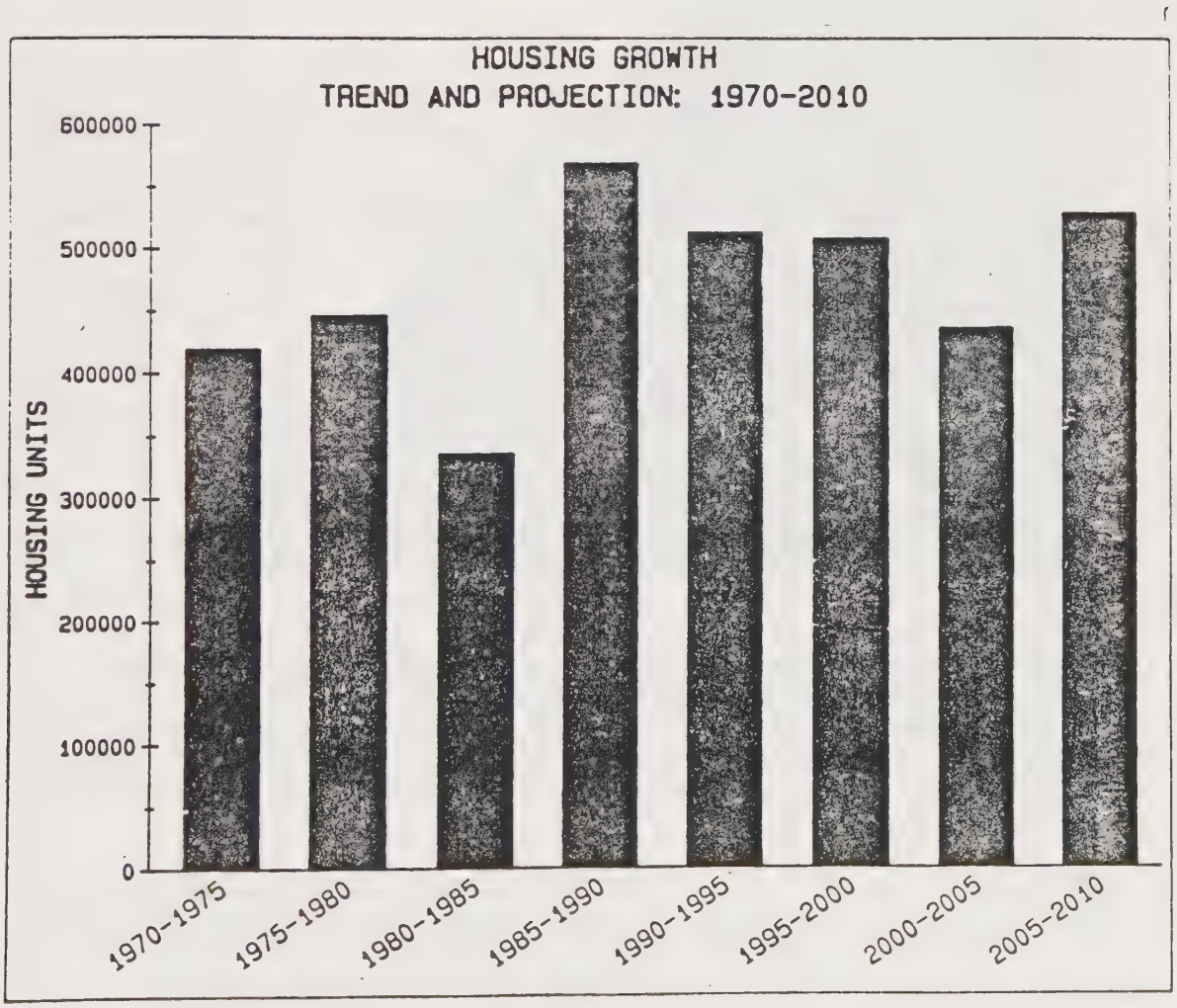
MEDIAN AGE OF THE U.S. AND THE SCAG REGION

	1980		2010	
	Male	Female	Male	Female
U.S.	28.8	31.2	36.8	40.2
SCAG	28.7	30.6	34.5	37.0

3. Housing

From 1970 to 1980 there was a net addition of 870,000 units to the region's housing stock (See Figure II-3). This was somewhat equivalent to a new city the size of Anaheim constructed each year. However, fluctuations in the economy have dramatically affected the total number of dwelling units constructed annually. For example, from 1975 to 1976 the net regional increase in total housing was only 45,000 units compared to 98,000 units from 1978 to 1979. The 1984 (base year of the projection) estimate of total number of dwelling units in the region was 4,650,400, for an annual average of 48,000 added units since 1980. The most recent estimate of housing in the region is 4,925,277 in 1987, for an annual average of 91,600 added units between 1984 and 1987. Under the Baseline projection we can expect an additional 2.4 million units by the year 2010, which is a level of growth (49%) higher than the projected percent increase in population (37%) between 1987 and 2010.

Figure II-4



Housing is projected to grow faster than population by the year 2010 for several reasons. First, the age structure of the population is projected to shift to the older years. This shift will result in a drop in the regional household size (and a consequent increase in the number of needed dwelling units) because older people have a tendency to live in small households. Second, consistent with the demographic assumptions made throughout the Baseline projection work, it is assumed that the differences in demographic behavior between the various ethnic groups will slowly diminish with time. This results in a further decline in the household size projection above and beyond that which would have occurred if only the changing age structure were taken into account. The estimated household size of 2.83 in 1984 is thus projected to decline to 2.69 by the year 2010. In addition, the Baseline projection also assumes that the proportion of second homes will increase by the year 2010. This is based on the observation that personal income is projected to increase significantly over the next two decades; the number of individuals in their 40's and 50's will increase significantly (typically the peak-years for ownership of a second home); and recent trends indicate increases in the proportion of second homes.

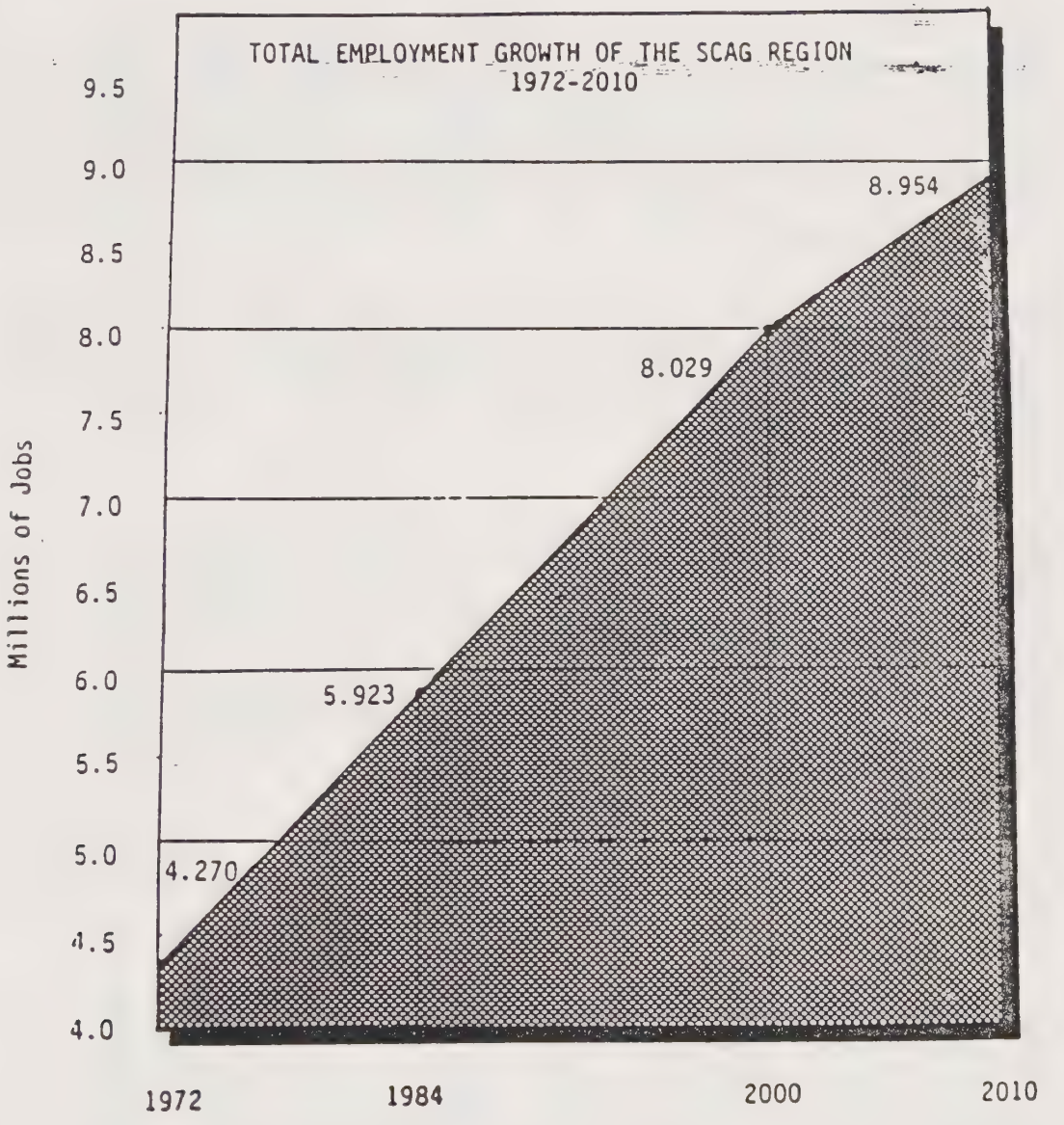
4. Employment

Total employment in the SCAG region increased from 4,270,000 in 1972 to 5,923,100 in 1984. This was an era of robust growth especially since the late 1970's. Only the states of California, New York and Texas have more jobs than the SCAG region. The Draft Baseline Projection shows the region's total employment increasing to almost 9.0 million jobs. (See Figure III-5) This is an increase of 3 million jobs or 51% over the 1984 total. This is about the equivalent of adding all the jobs in the states of Washington and Oregon to the SCAG region. Although the projection shows jobs growing at the rate of 2% per year, this is less than the 3.2% average annual job growth that the region experienced between 1972 and 1984. The slower growth reflects moderation in long term growth rates at the national level.

In recent years there has been a dramatic shift in the Southern California economic base. The region has been undergoing a transition from a goods producing manufacturing economy to an information-based services economy. This trend toward a service-based economy is projected to continue into the future. The share of service industries as a part of total jobs is projected to increase from 22% in 1984 to 29% in 2010. However despite these trends, it is important to realize that manufacturing will remain an important part of our economy and is projected to add another 300,000 jobs by the year 2010.

Within the manufacturing industries changes are projected to occur. High growth is projected for the low-skilled, low-wage sectors and the high-skill high-wage sectors, while generally moderate to flat growth is projected for the middle-skill, middle-wage sectors.

Figure II-5



* 2000, 2010 Based On Output From SCAG Economic Projection Model

B. SUBREGIONAL BASELINE PROJECTION

1. County Distribution

Imperial County

Imperial County is the least populated county in the SCAG region (102,000)--representing less than 1% of the region's 1984 population. Since 1970, the county has been growing at an average rate of 2.6% per year. In the year 2010, Baseline projects 160,000 people, an increase of 58,000 people for an average growth rate of 2.2% per year. During the same 26-year period, housing is projected to increase by 26,000 units.

Imperial County had 37,000 jobs in 1984, and accounted for less than 1% of all jobs in the region. By 2010, the county is projected to add 28,000 jobs, about 1% of the projected increase in the region's jobs. By 2010, Imperial County's employment is projected to be 65,000, an increase of 76%.

Los Angeles County

Los Angeles County, with a 1984 population of 7.9 million is the most populous county in the region and state--representing almost two-thirds of the region's and a third of the state's population. This county witnessed tremendous growth during the 1940's and 50's, growing at an average of almost 5% per year. More recent trends (1970-84), however, show population growth averaging about 1% per year. In 2010, Baseline projects almost 10.0 million people, an increase of 2.1 million.

Los Angeles County is projected to experience the largest gain in housing units in the region with an addition of 912,000 units; however, all the other counties will grow significantly faster (Los Angeles Co. 31% *vs.* Orange Co. 61%, San Bernardino Co. 137%, Riverside Co. 174%).

In 1984, Los Angeles County had 4.1 million jobs, accounting for 68% of the region's jobs. By 2010, the county is projected to add 1.4 million jobs, about half of the projected regional increase between 1984 and 2010. This brings the total number of county jobs in the year 2010 to 5.5 million, which represents a 36% rate of increase in employment over the period. The county's share of the regional employment will decline to 61%.

Orange County

Between 1960 and 1984 the county's population tripled and reached a 1984 population of 2.1 million. By 2010, the Baseline projects 3.1 million people in Orange County, an addition of 1.0 million--double the pace of Los Angeles County, however, significantly slower than both Riverside and San Bernardino Counties.

Orange County is projected to grow from 760,000 housing units in 1984

to 1.2 million in the year 2010, an addition of 464,000 housing units during the 26-year period. This growth represents 17% of the region's projected housing growth--a smaller share than the 27% captured during the period between 1970 and 1984.

Orange County had 1,048,000 jobs in 1984, or 18% of the region's total employment. By 2010, the county is projected to add 877,000 jobs (87% increase), which is about 29% of the projected regional increase in jobs between 1984 and 2010. By 2010, Orange County's employment is projected to be 1,925,000. Orange County will account for 22% of the region's total employment, a slight increase in its regional share from 1984.

Riverside County

Between 1970 and 1984, Riverside County was the fastest growing county in the region, with an average population growth rate of 4.6% per year. In 1984, the population of the county was 757,000. By 2010, the county is projected to increase by an additional 1.2 million people or 6.2% per year--continuing as the fastest growing county in the region.

With only 3% of the total county land currently urban, the potential for housing growth is significant--land being both ample and affordable. Housing is projected to increase by 566,000 units and capture 21% of the region's housing growth.

In 1984, Riverside County had 247,000 jobs, which represented 4% of the regional employment. By 2010, the county is projected to add 230,000 jobs, about 8% of the projected increase in regional employment over the 26-year period. By 2010, Riverside County's employment is projected to be 477,000 jobs. This represents a 93% increase in employment over the period. The county's share of total jobs in the region will increase slightly, to 5%.

San Bernardino County

San Bernardino is the largest county in the nation in area size, yet it ranks sixth in population in the state. In 1984, 1.0 million people resided in the county, with three-quarters of this total population concentrated on only 2% of the county's total land area. By 2010, San Bernardino County is projected to have 2.2 million residents, more than doubling (118%) its current population. This represents an average annual growth rate of 4.5%. The county would also capture 21% of the regional growth over the period between 1984 and 2010.

Housing is projected to increase from 409,000 units in 1984 to 970,000 in the year 2010, for an increase of 137%. This make San Bernardino County second only to Riverside County as the fastest growing county in the region for both population and housing.

In 1984, San Bernardino County had 325,000 jobs. The county accounted for about 6% of the regional employment. By 2010, the

county is projected to add 309,000 jobs, about 10% of the projected increase in regional employment over the 26-year period. By 2010, San Bernardino County's employment is projected to be 634,000 jobs. The county's employment is projected to grow by 95% over the period. The county's share of total jobs in the regions will increase slightly, to 7%.

Ventura County

Between 1970 and 1984, Ventura County's population grew by over 200,000 people for an average rate of 3.9% per year. This gave Ventura County a 1984 population of 580,000. By the year 2010, the county is projected to add 330,000 more people for an average growth rate of 2.2% per year. This represents about 6% of the region's population growth.

The county's 2010 housing total is projected to increase by an additional 140,000 units over the 1984 estimate of 197,000 housing units, an increase of 71%.

Ventura County had 213,000 jobs in 1984. The county accounted for slightly less than 4% of all jobs in the region. By 2010, Ventura County is projected to add 143,000 jobs, or 5% of the projected increase in regional employment between 1984 and 2010. By 2010, Ventura County's employment is projected to be 356,000. This is a 67% increase in the county's employment over the 26-year period. The county's share of total regional jobs will still be about 4% of the regional total.

2. Subregional Distribution

The Baseline Projection shows very high levels of population and housing growth occurring in most areas of the region, but particularly in the urbanizing and mountain/desert subregions. Of the 5.9 million people added to the region from 1984 and 2010, 3.1 million are added to the urbanizing subregions and 900,000 to the mountain/desert subregions. More than two-thirds of the region's growth is projected in these two groups of subregions, which double in population. The highly urbanized subregions are projected to add 1.9 million people.

Employment growth contrasts with population and housing growth. The majority of employment growth is still projected to occur in the highly urbanized subregions. Of the 3.0 million jobs projected to be added to the region by the year 2010, 1.7 million or 57% are projected to be in the highly urbanized subregions; 1.1 million or 36% in the urbanizing subregions; and 0.2 million or 7% in the mountain/desert subregions.

The percentage share of the regional population and employment growth between 1984 and 2010 is as follows:

	POPULATION	EMPLOYMENT
o Highly Urbanized Subregions:	32%	57%
o Urbanizing Subregions:	53%	36%
o Mountain/Desert Subregions:	15%	7%

The five subregions that are projected to show the largest absolute increases for population and employment are:

POPULATION		EMPLOYMENT	
o Southeast Orange:	738,000	o Northwest Orange:	456,000
o West San Ber. Val:	577,000	o Southeast Orange:	416,000
o East San Gab. Val:	478,000	o Santa Monica Bay:	300,000
o Central Riverside:	468,000	o Central L.A.:	297,000
o Riverside/Corona:	447,000	o San Fernando Val:	268,000

In terms of percentage increases, the five most rapidly growing subregions are projected to be:

POPULATION		EMPLOYMENT	
o Central Riverside:	239%	o North L.A. Co:	316%
o Santa Clarita Val:	200%	o Santa Clarita Val:	315%
o North L.A. Co:	178%	o Central Riverside:	267%
o Riverside Desert:	163%	o Santa Monica Mts.:	264%
o San Bernardino Des:	144%	o West San Ber. Val:	133%

For a more detailed discussion of The Draft Baseline Projection refer to SCAG's publication Draft Baseline Projection, Background Information for the Development of SCAG Growth Forecast Policy, August 1986 and accompanying documents December 1986 and February 1987.

CHAPTER III

SUMMARY OF BASELINE IMPACTS ASSESSMENT

A. INTRODUCTION

The addition of about 5.9 million more people to this region and the economic and demographic changes from 1984 to the year 2010 will have significant impacts on the region. While the growth of people, houses and jobs may offer many opportunities, it also presents the prospect that some existing problems may worsen, absent adequate mitigation or intervention programs.

In the winter of 1986-87, an assessment was made of the impacts of the Baseline Projection on the region's socioeconomic, infrastructure and natural environment. A summary of the impacts is presented in this chapter. For more detail please see Impact Assessment: Draft Baseline Projection (March, 1987) under a different cover.

B. SOCIOECONOMIC IMPACTS

1. Housing

The addition of 2.9 million dwelling units projected between 1984-2010 raises questions as to the housing industry's ability to accommodate this demand. Potential issues of inadequate infrastructure, inadequate zoned land and local political pressures for growth control also could create major impediments to the projected housing growth.

The need for more low and moderate income housing will become more critical. There is a current shortage of low and moderate income housing for the region as a whole; the 1983 Regional Housing Allocation Model estimated a shortage of 800,000 units. With rising costs and diminished federal support, meeting all the region's housing needs will be a major challenge. The Regional Housing Assessment currently in preparation by SCAG addresses this issue in greater detail.

2. Economic/Employment

From 1984 to the year 2010, the region is projected to add another 3.1 million jobs.

Four major issues/impacts arise from the growth in jobs:

(1) A possible slowdown in the economy if sectors requiring higher skills cannot find a ready labor pool in the region (matching skills of the future population with those required by future jobs).

(2) Current job/housing imbalance in various counties will continue

and worsen by 2010 with the Baseline Projection.

(3) Impacts on the natural environment resulting from the extensive commercial and industrial development.

(4) Infrastructure limitations, as well as, air quality, hazardous waste and water quality regulation could seriously constrain economic growth.

3. Public Services

Education: By the year 2010, it is projected that there will be approximately 870,000 more school-age children (5-17 years old) in the region than in 1980. The increase in the student population will require an additional 580 elementary/junior high schools and 95 senior high schools. In addition, 31,000 more teachers will be needed. An estimated 800,000 immigrant children will be going through the school system over the next 30 years. To meet these demands, new resources, teacher recruitment, and special education programs will be necessary.

Health Care: Because of the changing demographics, the need to provide accessible, affordable and effective health care will be a major challenge. The 65 and above age group, which uses health care services at three times the rate of the general population, will double (104%) by the year 2010. This will result in the need for skilled nursing facilities, custodial nursing home care, and alternative "lifecare" communities. Changes are also needed to insurance coverage for the population 65 and over.

The health care system also must consider the continuing needs of the poor who must rely on free or low cost health care MediCal and/or county programs, and the immigrants who require, in some cases, special public health services.

Social Services: The poor and many of the immigrants, the young and the elderly will require public assistance programs such as AFDC (Aid to Families with Dependent Children), Food Stamps and MediCal. There will also be expanded need for family and personal support programs such as counseling, services for the elderly, youth and recreation programs, and legal aid.

Criminal Justice: The significant increase in population over the next 25 years means that law enforcement, the court system, legal personnel, and correctional facilities (jail, prisons, juvenile facilities) all will need to be significantly expanded. For example, in order to maintain the current ratio of 1.95 police/sheriffs per 1,000 population, an estimated 11,430 additional police/sheriffs will be needed.

4. Governance

Growth in the urbanizing area will result in the creation of new cities and major annexations to existing cities. In addition, the

growing change in the ethnic population will have major implications for political representation of minority groups.

5. Neighborhood/Community

The demographic growth and change are expected to affect the character of many of the neighborhoods and communities that make up the region. New communities will be formed and many communities will experience an increase in population. New residential developments will emphasize multi-family dwelling units. Many outlying suburbs will become more urbanized, and redevelopment will play a large role in development of older communities.

C. INFRASTRUCTURE IMPACTS

1. Transportation

The growth involved in the Baseline Projection would significantly increase congestion that currently exists on the region's ground transportation network.

- o Daily person-trips on the roadway network would increase by 45% over 1984 levels, growing from 40 million trips to 58 million trips. Home-to-work person trips also would increase by 45%.
- o Increase in home-to-work trips between counties reflect a growing disparity in the location of jobs and housing throughout the region. The greatest increase in inter-county work trips would occur between Riverside and Orange Counties.
- o Daily vehicle miles of travel (VMT) would increase by 75% over 1984.
- o Average daily speed on the entire network is predicted to drop from 35 mph in 1984 to 19 mph in 2010.
- o About 50% of the region's daily travel time would be spent in delayed travel in the year 2010, as compared to 10% in 1984.
- o Five times as much congestion regionwide; the largest increase will be in the outlying counties.
- o Roadway needs in the year 2010 range from 4,181 lane-miles (AM Peak) to 6,000 lane-miles (PM Peak). This is ten to nineteen times more lane-mile needed than today.
- o Transit ridership would undergo only a modest increase by 2010.
- o Airports will be expected to handle an additional 84.3 million annual passengers.

The Existing Plus Funded transportation system is clearly inadequate under Baseline Projection loads. A combination of highway and

transit projects, as well as more widespread use of growth management, demand, and system demand management techniques will be needed if these growth levels are to be accommodated in the region.

2. Water Supply

Projected water demand based on added population is expected to increase by 12% over 1984 levels, and could exceed dependable supply by about 1.20 million acre-feet per year during dry years by 2010. Urban water consumption is projected to increase about 30% between 1984 and 2010. Concurrently, expanded water conservation and higher housing densities are expected to result in declining per capita consumption levels. Agricultural water demand, is also expected to decline slightly (about 2%) over the same period.

3. Waste Disposal

Wastewater Treatment: The region as a whole will experience an 18% shortfall in wastewater treatment capacity by 2010 unless facilities are enlarged or expanded. Shortfalls by county: Riverside (97%); Imperial (36%); San Bernardino (31%); Los Angeles (12%); Orange (9%); and Ventura (8%).

Solid Waste: Without any further population growth in the region, existing landfill capacity in four counties is expected to be depleted before 2000 (Ventura--1989; San Bernardino--1991; Orange--1996; and Los Angeles--1997). With the level of population growth under Baseline, capacity will be depleted even earlier.

Hazardous Waste: Hazardous wastes are estimated to increase by 16%, based on the projected slower growth of those industrial sectors generating the bulk of these wastes. Siting for treatment and disposal will be critical.

D. NATURAL ENVIRONMENT IMPACTS

1. Air Quality

The projected growth in Southern California over the next twenty five years will lead to continued postponement of attaining air quality standards, unless significantly more stringent controls are enacted. Estimates of year 2010 emissions in the South Coast Air Basin resulting from the Baseline Projection indicate the following:

- Emissions of reactive organic gases (ROG) would be almost four times the level allowable under federal standards, even if all adopted controls measures in following plans were fully implemented: the 1982 Air Quality Management Plan, the 1984 Regional Transportation Plan, and the 1985 NOx Plan.

- Emission of particulates (TSP) and carbon monoxide (CO) would be three times and one and one-third times the allowable levels respectively.

- o But, by 2010, emissions of most pollutants (ROG, TSP, and CO) decline from the 1984 levels. This is due solely to emissions reduction from mobile source controls already in place, since stationary source emissions actually increase from 1984 to 2010.

- o Because of a slowing rate of turnover of the vehicle fleet, the projected reduction from mobile source controls are currently being re-examined. SCAG is working with the South Coast Air Quality Management District to structure revised Air Quality plans to attain standards by the year 2007.

2. Open Space

Ninety percent of the region's open space land is in the outlying mountain and deserts, with only 10% in the highly urbanized and urbanizing subregions. By the year 2010, 40% of the existing open space in the highly urbanized subregions will have been lost to development, bringing the amount of remaining open space down from 21% to 13% of the land in these subregions. In the urbanizing subregions, the overall amount of open space is projected to drop from 85% to 70% of the total land area.

CHAPTER IV

ISSUES AND POLICIES

A. ISSUES

1. Growth Management

The most formidable challenge facing Southern California is how to deal, in a pro-active manner, with the changes created by the tremendous amount of demographic and economic growth it is experiencing and the changes yet to occur. Current realities: overcrowding, congestion, and degradation of the natural environment have accompanied the growth, which, in size and diversity, exceed growth anywhere in the industrialized countries of the world. Impacts have been exacerbated by fiscal limitations. Today, many communities are considering enactment of ordinances limiting growth which may not ameliorate conditions. A possible alternative is the design of an explicit government program to guide the timing and distribution of development within the region. A growth management program outlines regional goals, strategies for attaining them, and implementation measures. It is an option which integrates a variety of techniques to attain mobility and clean air goals, and achieve a desired regional growth pattern without resorting to exclusionary measures and excessive constraints.

2. Job/Housing Balance

Rapid growth, heterogeneity, diversity and dynamism have characterized the evolution of the Southern California Region, especially during the past decade. A closer look at this picture reveals unbalanced rates of change and of spatial distribution throughout the region over the years. These phenomena are among the reasons why the positive aspects of growth are overshadowed, and why growth has brought such severe impacts.

From 1970 to 1984 total employment in the region increased approximately by 41%, most of it in the highly urbanized areas of Los Angeles and Orange county. The two counties captured around 80% of the growth in employment. Proportionally this is almost twice as much employment growth as housing construction. The region registered a 31% increase in housing between 1970 and 1984 with only 45% of the growth occurring in these highly urbanized areas. This means that more workers had to drive longer distances to get from their residence to place of work and back. Residents of several communities in Riverside and San Bernardino counties drive long distances to their job in Los Angeles or Orange county. For some, the one way commute already reaches ninety minutes to two hours.

Most of the employment growth between now and 2010 is projected to occur in the highly urbanized areas while most of the increase in housing construction is projected to take place in the urbanizing regions of Riverside, San Bernardino and South East Orange county. This increasing job/housing imbalance can only intensify existing

problems and further impact patterns of mobility and air quality, the distribution of tax revenues, the character of communities, productivity and socio-psychological well being of workers, and the general quality of life in the region.

In response to the job/housing issue, SCAG prepared a paper examining various actions to achieve job/housing balance (Appendix 1). The consultants of Sedway Cooke Associates, also developed a menu of strategies and implementation mechanisms to ameliorate current job/housing imbalances. (Appendix 2) The Sedway Cooke paper presents four distinct strategies: planning, investment, financial and regulatory.

3. Congestion and Air Quality

One of the most difficult aspects of life in Southern California is being able to get around on roads and freeways within a reasonable amount of time and with a minimum of stress and frustration. With a projected addition of almost 5 million people by the year 2010, what is now difficult is certainly going to be impossible. The existing and currently planned regional transportation system will be unable to handle the pressures of 18.3 million people.

Analysis of patterns of mobility indicate that the existing congestion of the region's freeways and arterial networks is not only a function of population and employment increases, it is also related to the unbalanced distribution of jobs and housing within the region. Job/housing imbalance contributes to an increase in transportation demand. As the number of person trips, vehicle hours traveled and vehicle hours of delay increases, congestion worsens and, when it reaches unmanageable proportions, leads to situations of 'gridlock'.

Congestion exacts costs from both employers and employees. For workers who have to spend more time commuting to their place of work, the costs can be measured in terms of lost time, increased fuel and transportation expenditures, stress, and reduction in available leisure time. Employers on the other hand have to absorb the cost of employees tardiness and diminished efficiency and productivity, as well as increased business trip costs.

The family as a social institution is also negatively impacted when its members have to cope with added strains and stresses due to long commutes. The family where both parents work is becoming more and more the norm rather than the exception. Longer commutes mean spending more time away from home and family members, incurring higher child care expenditures, and sacrificing leisure and recreation time. The added financial and emotional pressures on the family unit are potential sources of tension between its members.

The detrimental effects of job/housing imbalance on mobility patterns are also linked to the further deterioration of the regional air quality. Increased vehicles miles traveled and congestion result in

increased emissions. Increased fuel consumption puts more strain on energy resources. The adverse environmental effects of the imbalance in the distribution of jobs and housing is obvious.

4. Housing

Meeting the housing needs of a growing population with a changing household composition is another demanding challenge. Aside from providing the necessary added units, other related housing issues must be addressed at the regional level. Questions of quantity, affordability, equitable distribution, and equal access are priorities that are addressed in the Regional Housing Needs Assessment prepared by SCAG and incorporated in the City and County General Plans. The housing stock in the region is aging, we are no longer a 'new' region. Preservation, rehabilitation, code enforcement and housing quality in general are other concerns.

5. Urban Form

Another critical issue centers around the mix and density of future land uses. Evolving urban forms at the macro and micro level, their dispersion, concentration, scale, pattern and densities have repercussions on the quality of life in the region and in its communities. The USC Planning Institute's paper on urban form identifies nineteen activity centers in the region which comprise only 17.5% of the jobs. The remaining 82.5% of employment is dispersed throughout the region in "activity nodes" which, with proper attention to architectural elements, could become the new sub-centers, helping to provide for job/housing balance and increased regional 'livibility'. The USC paper also presents the following urban form strategies: encourage the expression of the cultural and ethnic make-up of the community; properly relate the landscape and major travel routes; highlight the architectural style of the area, t; add medium-to-higher density residential development in commercial districts. (For more detail see Appendix 3).

6. Socio-economic Polarization

Uneven patterns of upward social mobility have led to a 'bipolarized' population. Those who can take advantage of economic opportunities leave their neighborhoods leaving behind disadvantaged social groups. Minorities, the elderly, the disabled, and single-parent households face the task of improving the socio-economic condition of the area with less resources and declining social services. This often results in widening the gap between affluent and economically disadvantaged groups and in the increase of informal economic activity, `shadow' housing markets, and crime.

The USC Planning Institute warns that growth control policies would benefit only affluent homeowners who would not be affected by a decrease in job availability in their area. The policies will result in less congestion and easier access to services in affluent areas, but only to those who can afford to stay. (For more detail see Appendix 4).

7. Open Space

Growth also impacts the need for the preservation of open space, viable agricultural and recreational land. This issue is addressed in the Sedway Cooke and Associates' paper (See Appendix 5 for more detail). The designation of open space areas should be based on what is needed to protect such vital natural resources as wetlands, groundwater recharge areas, floodplains, woodland, production land, and lands containing unique or endangered plants and animal; and based as well on what is needed to avoid such hazardous environmental conditions as erosion, poor soils, and seismicity. The open space system should be a primary basis for the development of regional and local comprehensive land use plans; and should be consistent with the jobs/housing balance objective.

8. Other Issues

At the local jurisdictional level jobs generate more revenues than costs. The imbalance in the distribution of jobs and housing is to the disadvantage of those cities with higher concentrations of residential units as they incur more costs than revenues. Disparities in the tax burden among cities are accentuated and inequities in infrastructure development are perpetuated.

Southern California's economy is shifting from a manufacturing to a service based economy. This trend will continue into the future and will be accompanied by changes in both types of jobs and type of the labor force. Middle skills middle wages jobs will not grow as fast as the high and low skill jobs. The composition of the labor force will change towards more older workers, more women and more new immigrant workers. The region needs to respond to these changes by providing innovative training and education to maintain a work force which is competitive, productive, and able to meet the challenges of new technology.

The intricate relationships between these different questions adds another dimension to the issues facing the Southern California region. Goals and actions designed to address one set of issues have ramifications and impacts on other issues. For example, the goals of providing equal job, education and housing opportunities impact mobility strategies and plans for government provision of services.

B. POLICIES

As mentioned in the previous chapters, the Baseline Projection was developed to reflect the future growth of the region with the assumption that current demographic and economic trends continued unchanged and that no new government policies will be adopted and implemented. The Draft Growth Management Plan, however, incorporates policies and a strategy to mitigate impacts associated with the Baseline Projection and intervenes with the trends. These policies help guide the distribution of growth within the region.

The policies of the Growth Management Plan are listed below:

- The adopted Growth Management Plan Forecast (SCAG-88) will be the basis for the SCAG functional plans, and the policies shall be consistent with the Regional Mobility Plan, Regional Air Quality Plan and the Regional Housing Needs Assessment.

- Achieve better job/housing balance at the subregional level. Encourage and provide incentives in job-rich subregions to attract housing growth; and encourage and provide incentives in housing-rich subregions to attract job growth.

- To the degree possible, achieving a balance, by subregion of the type of jobs with the price of housing.

- Encourage employment development in job-poor localities through support of labor force retraining programs and other economic development measures.

- To the extent possible, reflect current local jurisdictional policies related to population, housing and employment in the development of job/housing balance targets.

- Encourage growth to occur in and around:
  - activity centers
  - transportation nodes and corridors
  - underutilized infrastructure systems
  - areas needing recycling and redevelopment

- Forecast permanent populations for areas with large seasonal population fluctuations (ie. resort areas), however, appropriate infrastructure systems should be sized to serve the high-season population total.

- Preserve open space areas identified in local, state and federal plans and those in SCAG's Conservation and Open Space Plan. Preserve, wherever possible, prime agricultural land and open space areas separating communities. Protect vital natural resources as wetlands, groundwater recharge areas, woodlands, production lands, and land containing unique or endangered plants and animals.

- Limit development or use special design requirements for land with low suitability for development (ie. areas with steep slopes, high fire flood and seismic hazards).

CHAPTER V

CONTINGENCIES

A. INTRODUCTION

A regional growth management program incorporating the concept of job/housing balance and a regional strategy to achieve it presents definite advantages in terms of mobility, air quality, worker productivity and convenience, balanced tax revenues, and equitable housing distribution. Nevertheless, sound strategic planning calls for identification and discussion of contingencies that can be envisioned.

B. CONTINGENCY ANALYSIS

The following contingencies have been explored by consultants (The Planning Institute - U.S.C., and the Cordoba Corp.). The detailed reports are included in appendices to this plan.

1. Growth Control Contingency (Appendix 6)

The region is witnessing a burgeoning grass roots reaction to the perceived impacts of growth, and leading to "ballot box planning" to strictly limit growth as an emerging phenomenon. It is possible these actions could spread across major portions of the region, radically changing growth dynamics. The Planning Institute of the University of Southern California has prepared a report for SCAG that analyzes this issue.

The Planning Institute finds suggest:

- Cuts in the construction industry could result in a region-wide doubling of the unemployment rate affecting all sectors.

- Growth control could alter the dynamics of free-market on housing costs so that only the affluent and young will be able to relocate, leaving the economically disadvantaged, namely the poor, elderly, single parent families, and the ethnic minorities.

- An increase in the average household size could result in increased population densities in the urban areas (75% of the region's 2010 population will concentrate in the urban areas).

- Limits on new housing construction and the rising housing demand could result in a 50% reduction in the vacancy rate.

- With restricted housing and commercial growth, tax revenues of local governments will not reflect population growth. Communities will struggle to maintain social services, which could lead to increased crime and heightened racial tensions.

- By not allowing businesses and residences to co-locate in newly developing areas, growth control could give rise to longer trips, ironically worsening traffic conditions.

2. Economic Depression Contingency (Appendix 7)

The diversity of the SCAG economy and the strength of its labor force make this region exceptionally strong in the world market. Extra-regional and/or intra-regional forces could, however, trigger an economic downturn. The economic depression contingency identifies four such triggers:

Extra-regional
- Reduced international trade due to import/export quotas.
- A national economic depression affecting all sectors of the SCAG economy.

Intra-regional
- An environmental catastrophe significantly crippling industrial and public infrastructure.
- Local economic mismanagement driving away investment.

The Institute projects that a 10% cut in the value of new investments in all sectors causes a 115,740 (2.4%) loss in jobs; the construction and manufacturing sectors suffering the greatest losses. (A 5% cut results in half the employment loss for all sectors in the region.) The spatial effects of the economic depression contingency are regionwide with the less centralized/non-center areas heavily impacted. Far less impacted are the Los Angeles and Burbank centers, and those areas less reliant on construction and manufacturing.

3. Federal Budgeting Contingency (Appendix 7)

California has the highest allocation of the federal military budget ($24.7 Billion in 1987). The direct expenditures in the SCAG region aerospace industry, High-Tech industry, university and independent research institutions, and military installations have an indirect multiplier effect on the other economic sectors of the region.

The first scenario of this contingency study argues that a shift in the U.S. military budget away from strategical nuclear weapons, to an increased reliance on advanced tactical forces would redistribute federal military contracts to many small to mid size firms as opposed to few large-firms. It is argued that this change in federal income to the SCAG region might actually be beneficial as it would strengthen the existing trend of periphery development, improving the J/H balance.

Under a second scenario, if federal expenditures in the aircraft, ship-building, and missile and space sectors of military production, were cut by 10%, the impact would be a 0.18% regionwide loss in jobs, with the less centralized/noncenter areas more likely to be impacted. The centers are less affected, with the exception of the South Bay and Fullerton areas which sustain higher that average job losses.

4. Earthquake Contingency (Appendix 8)

The projected level of growth in the Southern California region increases its vulnerability to earthquake damage and disruption. A fifty percent probability exists that during the next 20 to 50 years Southern California will experience a major earthquake centered on the San Andreas fault. The Cordoba Corp. has prepared an earthquake contingency analysis that estimates the extent of social and infrastructure damages that could ensue in the event of a significant earthquake. Three main causes are expected to seriously damage social patterns and structures; homelessness, unemployment and migration. Pre-earthquake planning (ie. land use planning, zoning and seismic safety provisions in building codes, regional emergency coordination) could minimize earthquake damage. Post-disaster recovery needs and remedial measures are also needed (ie. federal disaster relief funds, local government land use planning, and private sector participation in the role of insurance and charity).

SCAG is currently working with SCEPP--The Southern California Earthquake Preparedness Project--to examine this contingency and develop action recommendations for local governments.

CHAPTER VI

GROWTH MANAGEMENT ALTERNATIVES

A. INTRODUCTION

This chapter summarizes the six Growth Management alternatives used in the development of the recommended alternative. The Growth Management Alternatives, 1 through 4, project a regional population, housing and employment total equal to the projected total under the Baseline Projection--18.3 million people, 7.3 million housing units and 8.9 jobs--. These four alternatives, however, differ in their allocation of population, housing and employment growth within the region. Two of the alternatives project different regional total (low and high), and incorporate the job/housing policy. An accompanying Draft EIR will assess the six Growth Management alternatives and the recommended alternative.

B. ALTERNATIVE TARGET ALLOCATIONS

1. Growth Management Alternative #1 (GMA-1): The Baseline Projection

The Baseline Projection is recognized as a possible alternative (GMA-1). Chapter III provided a description of the Baseline Projection which is a picture based on continuation of trends through 1984 with no new policy intervention. The job, housing, and population allocations can thus be viewed as the target allocation of a "business as usual" or no-action alternative.

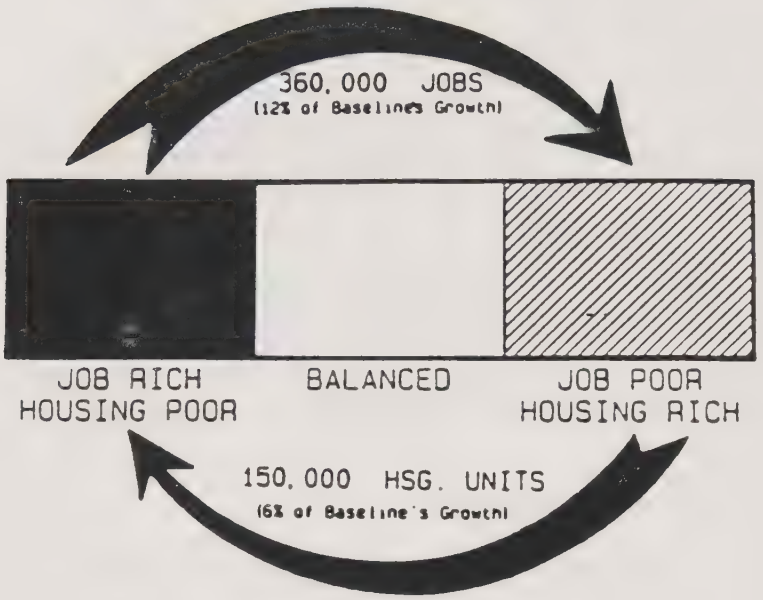
2. Growth Management Alternative #2 (GMA-2): The Mobility Sensitivity Test Alternative

Previous sections of this report have noted the problems which stem from the increasing job/housing imbalance reflected in the Baseline Projection. GMA-2 was developed to test the impacts--especially on transportation loads--of diverting a portion of added jobs and housing in the Baseline Projection into a more balanced pattern.

The goal of this alternative is to divert approximately 360,000 of **future jobs** from job-rich to job-poor areas and approximately 150,000 of **future dwelling units** from housing-rich to housing-poor subregions. This does not imply any redistribution of existing jobs or housing, and only partially modifies projected trends. The proposed shifts encompass only 12% of the region's employment **growth** of 3.0 million jobs and 6% of the housing **growth** of 2.7 million dwelling units.

Subregional distributions under GMA-2, or the Mobility Sensitivity Test Alternative, when used as the basis for transportation modeling, resulted in substantial improvement of the transportation system. Under this alternative both distance and commute time are reduced to more manageable levels, and air pollution from mobile sources was reduced substantially.

Figure V-1



3. Growth Management Alternative #3 (GMA-3): A Preliminary "Local Plans" Alternative

GMA-3 reflects forecasts from some jurisdictions which call for much smaller increases in population and jobs by the year 2010 than the trends reflected in the Baseline (GMA-1). The major difference in this alternative is a lowering of 219,100 people, 123,100 dwelling units and 349,500 jobs for Orange County. Since it is improbable this decrease alone, if it can indeed be implemented, would change total regional growth, the cutbacks have been redistributed to other subregions.

The extent of trend modification in Orange County would require rigorous implementation controls especially for the job growth cutbacks. Large scale economic segregation could also result from the growth cutbacks which might counter expected transportation benefits. The resulting increases of jobs in job-rich subregions of Los Angeles County could also result in worsening transportation loads in the built up portions of the region.

4. Growth Management Alternative #4 (GMA-4): An "Emerging Futures" Alternative

Since the Baseline Projection was based on trends up through 1984, it is important to more carefully examine shifting growth pressures which have occurred in the past three years. If recent events and decisions are more heavily weighted, an "Emerging Futures"

alternative, GMA-4, results. GMA-4 shifts roughly the same proportion of added jobs and housing as in GMA-2, and results in similar benefits in reducing congestion and improving air quality as GMA-2.

5. Growth Management Alternative Low (GMA-LOW J/H): Low Regional Total Alternative.

   Projects a regional population in the year 2010 of 17.1 million people--1.12 million lower than the GMA-4 Mod. J/H Alternative. The population total is based on the State Department of Finance's 2010 projections at the county level. To achieve the lower regional total, all ethnic fertility rates were lowered while net migration was not adjusted since both SCAG and DOF assumed similar migration levels. Both the job and housing projections were determined based on the labor force and households derived from the lower population projection.

6. Growth Management Alternative High (GMA-HIGH J/H): High Regional Total Alternative.

   Projects a regional population in the year 2010 of 20.2 million people--1.9 million higher than the GMA-4 Mod. J/H Alternative. The population projection is based on the continuation of the past five year trend. Jobs are based on a higher U.S. forecast by the Bureau of Labor Statistics. However, the jobs projected for the region under this alternative would not fully employ the high population that is projected, thus implying a higher unemployment rate (11%).

TABLE VI-1

GROWTH MANAGEMENT ALTERNATIVES
POPULATION

	1984	1988	GMA-1 2010	GMA-2 2010	GMA-3 2010	GMA-4 2010	GMA-LOW 2010	GMA-HIGH 2010
SAN FERNANDO VAL	1177400	1272400	1465100	1536900	1475900	1469700	1504000	1706200
GLENDALE/PASADENA	1202200	1283300	1509400	1509400	1516600	1449700	1345800	1493500
EAST S. GABRIEL VAL.	739300	820500	1216900	1171200	1247700	1172200	1008000	1190600
SANTA MONICA BAY	1297400	1387000	1550500	1622100	1555200	1594200	1525000	1703400
CENTRAL LOS ANGELES	2102000	2288100	2240600	2346300	2235800	2395200	2257100	2443500
LONG BEACH/DOWNEY	1075800	1153300	1260400	1260400	1266900	1324100	1247300	1366300
NORTHWEST ORANGE	1425200	1502500	1670900	1741100	1624600	1662700	1702100	1821800
URBAN	9019300	9707100	10913800	11187400	10922700	11067800	10589300	11725300
OXNARD/VENTURA	370600	385700	558700	558700	558700	528200	483300	564300
SIMI/THOUSAND OAKS	208900	251200	350000	350000	350000	407300	380000	471700
SANTA CLARITA VAL.	89200	95100	268000	268100	276700	272300	220500	294500
SANTA MONICA MTS.	58100	88400	105100	105100	107300	105000	99900	123100
WEST S. BERN. VAL.	401100	504700	978300	939700	1017300	848600	747100	1025500
EAST S. BERN. VAL.	379400	453100	680500	660000	694900	796400	673400	914000
RIVERSIDE CORONA	378100	469100	825200	738700	855600	778300	726700	1005500
CENTRAL RIVERSIDE	195800	237100	664300	618500	692900	572800	482300	678300
SOUTHEAST ORANGE	641300	736300	1379300	1410100	1206500	1313400	1231300	1426500
URBANIZING	2722500	3220700	5809400	5648900	5759900	5622300	5044500	6503400
LOS PADRES	500	500	900	900	900	600	500	500
NORTH LOS ANGELES	118900	165700	330400	330400	340200	381800	479700	662600
ANGELES FOREST	2400	2200	2300	2300	2300	2400	2300	2400
S. BERN. FOREST	41900	53500	89900	89900	92100	80800	102400	142500
S. BERN. DESERT	192100	228700	469500	407200	482300	415400	379800	514200
RIVERSIDE DESERT	176800	232300	465000	414500	477900	490100	361700	487500
IDYLWILD	6800	7600	14800	14800	15200	18800	10100	12900
IMPERIAL	101700	111100	160000	160000	162800	176300	165100	146800
MNTS/DESERTS	641100	801600	1532800	1420000	1573700	1566200	1501600	1969400
REGION	12382900	13729400	18256300	18256300	18256300	18256300	17135400	20198100
COUNTIES								
IMPERIAL	101700	111100	160000	160000	162800	176300	165100	146800
LOS ANGELES	7862700	8555900	9948700	10152200	10024700	10166600	9689600	10986100
ORANGE	2066400	2238800	3050200	3151200	2831100	2976100	2933500	3248300
RIVERSIDE	757500	946100	1969300	1786500	2041500	1860000	1580700	2184100
SAN BERNARDINO	1014500	1240000	2218200	2096800	2286600	2141200	1902700	2596300
VENTURA	580000	637400	909600	909600	909600	936100	863800	1036500
REGION	12382800	13729300	18256300	18256300	18256300	18256300	17135400	20198100

TABLE VI-2

GROWTH MANAGEMENT ALTERNATIVES
HOUSING

	1984	1988	GMA-1 2010	GMA-2 2010	GMA-3 2010	GMA-4 2010	GMA-LOW 2010	GMA-HIGH 2010
SAN FERNANDO VAL	454000	475100	592500	624200	599700	594400	628500	687000
GLENDALE/PASADENA	442500	456200	574200	574200	581100	552800	530300	567000
EAST S. GABRIEL VAL.	233000	247900	404500	390900	416500	389500	346000	393800
SANTA MONICA BAY	519200	537400	643100	671900	649500	662700	655000	705000
CENTRAL LOS ANGELES	777100	826200	854900	896700	859000	916000	891900	930400
LONG BEACH/DOWNEY	400000	414600	483800	483800	489700	509400	495800	523300
NORTHWEST ORANGE	506000	536600	634300	663200	604700	633100	650700	693500
URBAN	3331800	3494000	4187300	4304900	4200200	4257900	4198200	4500000
OXNARD/VENTURA	129600	135500	213000	213000	213000	199000	188900	211500
SIMI/THOUSAND OAKS	66800	82200	123000	123000	123000	141500	136900	163000
SANTA CLARITA VAL.	29200	29300	99600	99600	103200	101100	84600	108900
SANTA MONICA MTS.	21300	30200	42500	42500	43600	42500	41700	49500
WEST S. BERN. VAL.	134100	171100	368900	354000	385300	319900	308900	381900
EAST S. BERN. VAL.	145800	175300	284900	275600	292100	333200	309000	377800
RIVERSIDE CORONA	130400	160900	318600	287500	331800	300400	307000	380900
CENTRAL RIVERSIDE	89200	108300	293500	274600	307700	253200	233300	294300
SOUTHEAST ORANGE	254000	292800	589500	603600	496000	562000	529100	610200
URBANIZING	1000400	1185600	2333500	2273400	2295700	2252800	2139400	2578000
LOS PADRES	300	300	400	400	400	300	300	300
NORTH LOS ANGELES	46100	64900	139200	139200	144000	160900	208900	278000
ANGELES FOREST	1100	1100	1100	1100	1100	1100	1100	1100
S. BERN. FOREST	43600	57600	98800	98800	101700	88700	123500	154700
S. BERN. DESERT	85000	100000	217600	189800	224500	192500	193000	235300
RIVERSIDE DESERT	100800	134400	267500	237800	276200	281900	227700	275200
IDYLWILD	5600	6600	12700	12700	13000	16000	9400	10800
IMPERIAL	33400	35700	59400	59400	60700	65400	53500	55100
MNTS/DESERTS	315900	400600	796700	739200	821600	806800	817400	1010500
REGION	4648100	5080200	7317500	7317500	7317500	7317500	7155000	8088500
COUNTIES								
IMPERIAL	33400	35700	59400	59400	60700	65400	53500	55100
LOS ANGELES	2923600	3082700	3835400	3924000	3887400	3930400	3883800	4244000
ORANGE	760100	829400	1223800	1266900	1100700	1195100	1179700	1303800
RIVERSIDE	326000	410200	892300	812600	928700	851500	777400	961100
SAN BERNARDINO	408600	504000	970200	918200	1003600	934300	934400	1149700
VENTURA	196600	218000	336400	336400	336400	340800	326200	374800
REGION	4648300	5080000	7317500	7317500	7317500	7317500	7155000	8088500

TABLE VI-3

GROWTH MANAGEMENT ALTERNATIVES
EMPLOYMENT

	1984	GMA-1 2010	GMA-2 2010	GMA-3 2010	GMA-4 2010	GMA-LOW 2010	GMA-HIGH 2010
SAN FERNANDO VAL	580900	848700	777400	852100	755200	793400	822600
GLENDALE/PASADENA	485400	610700	625800	612300	632100	507200	632100
EAST S. GABRIEL VAL.	239300	352200	397300	361000	403500	380700	414900
SANTA MONICA BAY	759500	1059600	975600	1063400	1006500	994200	1026500
CENTRAL LOS ANGELES	1435300	1731800	1645900	1735600	1676500	1625400	1651600
LONG BEACH/DOWNEY	482600	639000	639000	645300	684500	621500	640700
NORTHWEST ORANGE	680200	1136400	1036000	893600	946100	922700	956100
URBAN	4663200	6378400	6097000	6163300	6104400	5945100	6144500
OXNARD/VENTURA	158600	242600	255200	263800	243000	230000	252900
SIMI/THOUSAND OAKS	54300	97300	112300	108100	135300	126100	142700
SANTA CLARITA VAL.	23400	97200	97200	98100	99900	101000	123100
SANTA MONICA MTS.	13200	48200	48200	48600	48100	30600	34900
WEST S. BERN. VAL.	132800	309000	379500	381200	294800	354700	407500
EAST S. BERN. VAL.	135500	225800	278200	300100	253600	260500	294400
RIVERSIDE CORONA	133900	208000	259800	238300	217100	261000	295900
CENTRAL RIVERSIDE	39800	145800	220100	189300	150000	163600	196300
SOUTHEAST ORANGE	367800	783600	762800	676900	755800	722100	771100
URBANIZING	1059300	2157500	2413300	2304400	2197600	2249600	2518800
LOS PADRES	100	200	200	200	100	100	100
NORTH LOS ANGELES	32700	135900	135900	137200	167600	163200	198500
ANGELES FOREST	600	700	700	700	600	600	600
S. BERN. FOREST	8600	13800	13800	18000	25100	25600	30400
S. BERN. DESERT	48000	91400	100000	127000	184100	114900	132600
RIVERSIDE DESERT	71800	109500	126500	140500	191800	168900	191600
IDYLWILD	1500	2700	2700	3600	7600	5900	6800
IMPERIAL	37000	64000	64000	64000	77000	65600	67200
MNTS/DESERTS	200300	418200	443800	491200	653900	544800	627800
REGION	5922800	8954100	8954100	8958900	8955900	8739500	9291100
COUNTIES							
IMPERIAL	37000	64000	64000	64000	77000	65600	67200
LOS ANGELES	4053000	5524100	5343100	5554400	5474500	5317900	5545500
ORANGE	1048000	1920000	1798800	1570500	1701900	1644800	1727000
RIVERSIDE	247000	466000	609100	571700	566500	599400	690700
SAN BERNARDINO	325000	640000	771500	826300	757600	755600	865000
VENTURA	213000	340000	367600	372000	378400	356200	395700
REGION	5923000	8954100	8954100	8958900	8955900	8739500	9291100

SUBREGIONAL AREAS

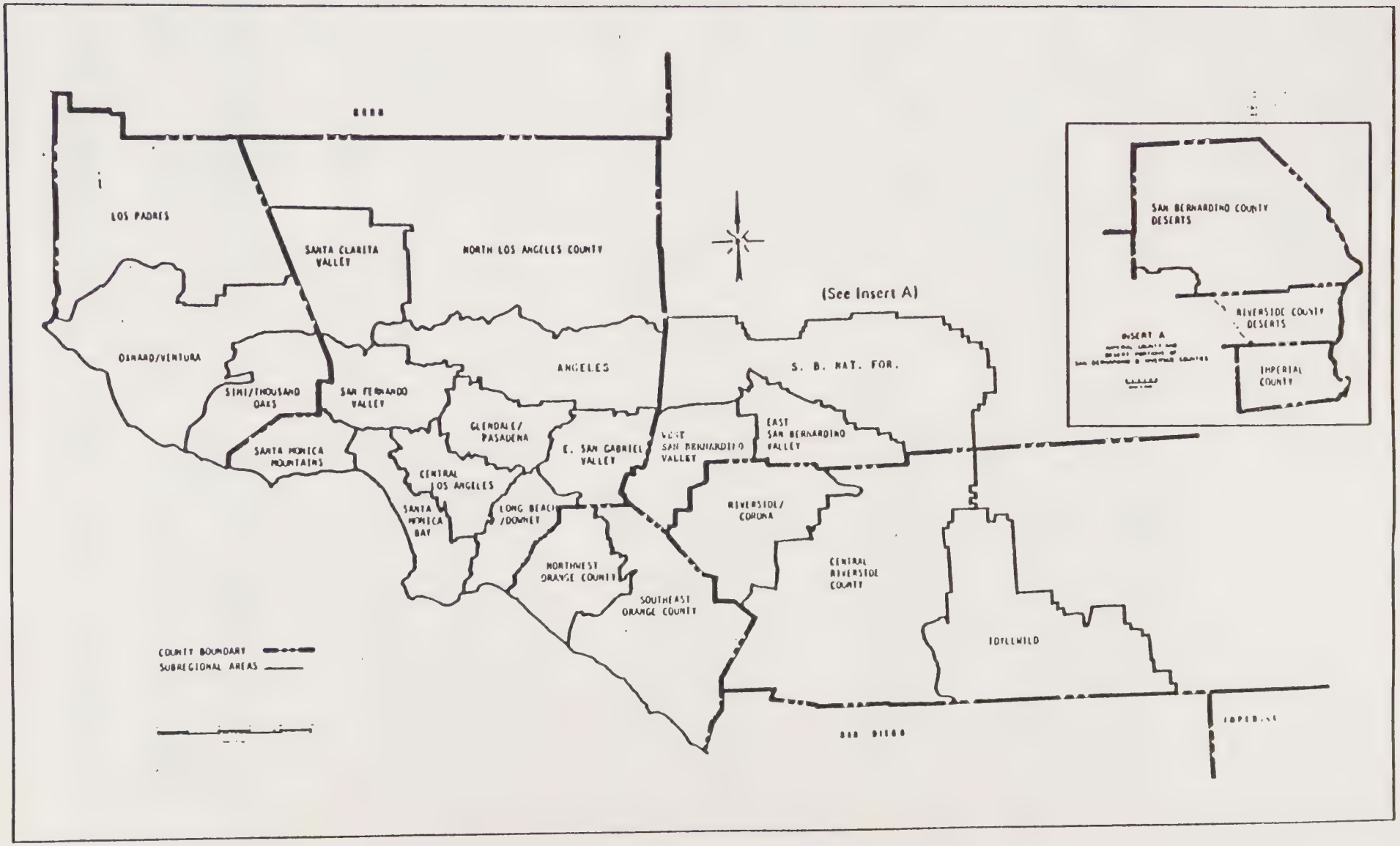


Figure VI-2

CHAPTER VII

RECOMMENDED ALTERNATIVE

A. INTRODUCTION

The alternatives described in the previous chapter were reviewed and commented on by SCAG committees and by local jurisdictions through the Out-Reach Program. From this review process, the SCAG Executive Committee gave direction for the development of a new alternative, which became the GMA-4 Modified Job/Housing Balance distribution of population, housing, and employment. GMA-4 Modified Job/Housing Balance Alternative is used in the Regional Housing Needs Assessment, the Draft Regional Mobility Plan and the Draft Air Quality Management Plan.

The intent of the GMA-4 Modified Job/Housing Balance Forecast is to reflect the most recent data in a trend projection; and then adjust the trend projection's distribution of housing and employment to achieve the levels of mobility and air quality that are comparable to that of the Mobility Sensitivity Test Alternative (GMA-2).

B. JOB/HOUSING BALANCE DEFINITION

Underlying the term job/housing balance is the concept that, if an area is balanced, it includes the right number (or balance) of housing and employment opportunities, so that most of the people living in it can work in the area. A balanced region is technically defined as having an employment to housing ratio of 1.27 in 1984 and 1.2 in 2010 (the regional averages). Job-rich subregions have ratios substantially greater than the regional average and housing-rich subregions have ratios substantially lower than the regional average.

Ideally the measurement of job/housing balance would include indicators such as the match between the price of housing within the area and the household income of the employees working in the area. This would assure that there is not only a match in the total number of jobs and housing but also a match in type of jobs and housing and would exclude households with no members in the labor force. Adding those factors to the definition would have resulted in data management requirements beyond the resources available. However, this match can be achieved through the review and job/housing balance implementation process.

C. METHODOLOGY

STEP 1 (GMA-4 Modified Trend): The trend projection was the result of an analysis of housing and employment trends from 1970 to 1988, giving more weight to the most recent years (1984-88). The GMA-4 Mod. Trend incorporates data through 1988 from the State Dept. of Finance for population and housing and employment data from the State Employment Development Dept.

STEP 2 (GMA-4 Modified J/H): A standard procedure and system was developed to incorporate the job/housing balance policy into the Trend

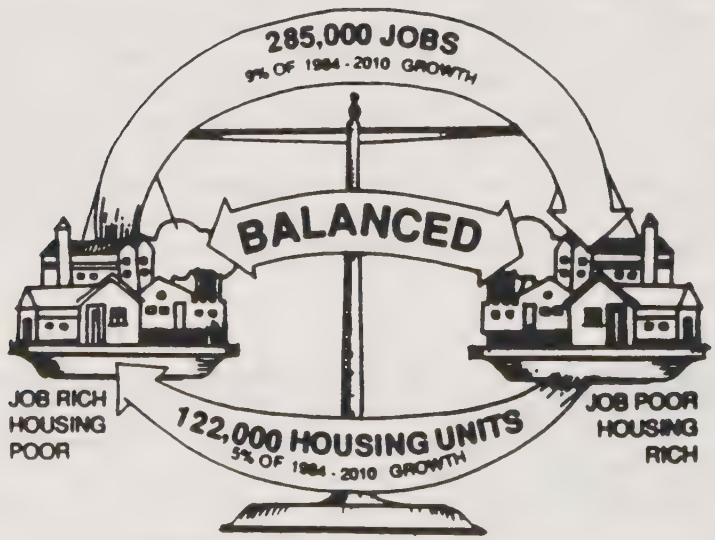
projection. A model was developed whereby each subregion's job/housing ratio under the Trend Projection (computed using added jobs and housing units) was converged by 20% to the region's 2010 ratio. First, job growth between 1984 and 2010 was reallocated from job-rich to housing-rich subregions. Then, housing growth was reallocated from housing-rich to job-rich subregions. This resulted in the housing and employment forecast for GMA-4 Modified Job/Housing Balance.

The population forecast under GMA-4 Modified Job/Housing Balance was developed from the housing forecast applying appropriate subregional occupancy rates and average household size.

D. JOB/HOUSING BALANCE: REGIONAL IMPACTS

The GMA4-Mod Job/Housing Balance forecasts were used as input for transportation modeling to assess the impacts of a more balanced distribution of jobs and housing among subregions on the regional transportation system. Redirecting 9% of new employment in the region between 1984 and 2010 from job-rich to job-poor areas, and 5% of the added housing from housing-rich to housing poor areas, results in substantial improvements on the transportation system and the regional air quality over baseline projections. Vehicle miles traveled are reduced by 32.5 million miles, and ROG (reactive organic gases) emissions are reduced by 33%.

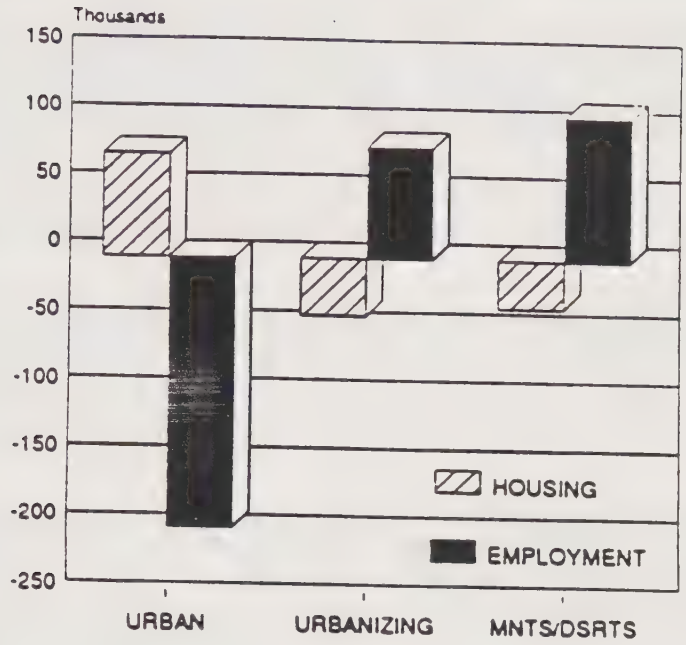
Subregional distributions of jobs and housing under GMA4-Mod J/H, besides reducing 2010 distance and commute time to more manageable levels, and reducing air pollution from mobile sources, would also have secondary beneficial impacts. It would help reduce the cost of congestion by increasing worker productivity due to savings in energy and time spent commuting; reduce strains on the family unit; reduce disparities in the tax burdens between cities and between counties; foster more cohesive and balanced communities within the Southern California Region.



JOB / HOUSING BALANCE

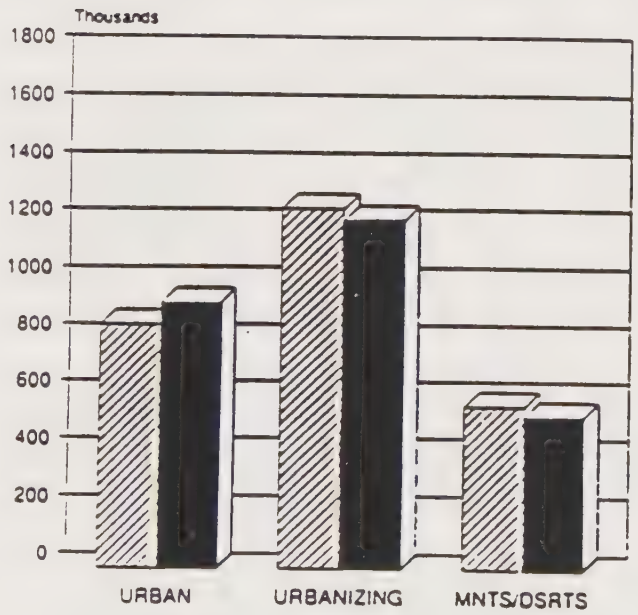
DIFFERENCE OF GMA-4 MOD J/H FORECAST FROM THE TREND PROJECTION 1984 - 2010

Figure VII-1
and
Figure VII-2

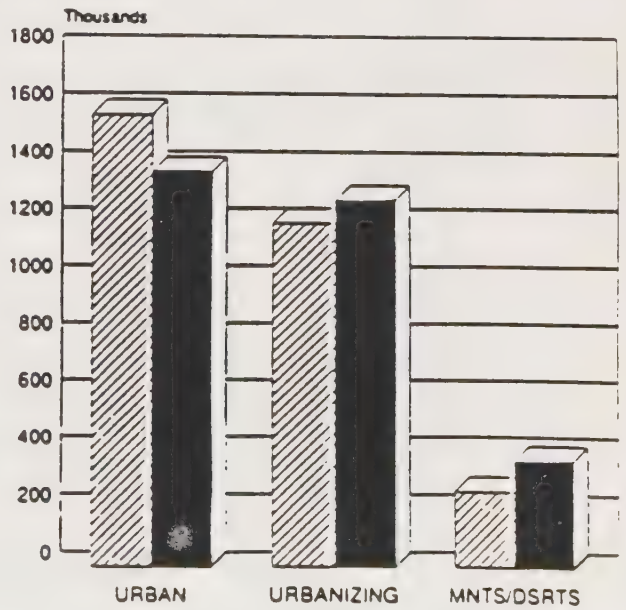


COMPARISON OF THE GMA-4 MOD J/H FORECAST AND THE TREND PROJECTION 1984-2010

HOUSING



EMPLOYMENT



TREND PROJECTION GMA-4 MOD

E. SUBREGIONAL DESCRIPTION

1. Urban Subregions

San Fernando Valley: The Trend Projections adds 179,700 units and 270,200 jobs to this subregion between 1984 and 2010. The high level of employment growth creates a job-rich subregion by the year 2010. The J/H computations results in the addition of 9,300 more units but a reduction in the employment growth by 41,300 jobs (unless job growth is mitigated towards achievement job/housing balance). J/H Forecast would lower the job/housing ratio from 1.34 under Trend to 1.26.

Glendale/Pasadena: The Trend Projection shows this subregion adding 101,800 units and 131,400 jobs during the 1984-2010 period. The J/H Forecast lowers the housing growth (unless mitigated) by 7,200 units and jobs growth (unless mitigated) by 600, shifting the year 2010 job/housing ratio up from 1.13 under Trend to 1.15.

East San Gabriel Valley: Trend projects an additional 131,400 units and 150,500 jobs over the 1984-2010 period, resulting in the job/housing ratio rising from 1.03 in 1984 to 1.07 in 2010. To better achieve job/housing balance, the J/H Forecast lowers housing growth by 9,300 units (unless mitigated) and increases employment growth by 1,800 jobs. As a result the job/housing ratio rises to 1.10.

Santa Monica Bay: Under the Trend Projection, this subregion grows by 122,000 housing units and 298,000 jobs between the years 1984 and 2010, making it the second most job-rich subregion (1.65). J/H Forecast computation adds 24,900 housing units over the Trend Projection and lowers the job growth by 45,600 (unless job growth is mitigated towards achievement job/housing balance), resulting in a drop in the job/housing ratio to 1.52.

Central Los Angeles: Trend projects a growth of 101,200 units and 241,900 jobs between 1984 and 2010. In 1984, this subregion had the highest job/housing ratio (1.85), and under the Trend Projection it becomes even more job-rich (1.91 by 2010). The J/H Forecast computation diverts an additional 19,800 units and 37,700 less jobs than the Trend Projection (unless job growth is mitigated to achieve job/housing balance), thus lowering the job/housing ratio to 1.83 -- a ratio still significantly higher than the regional 1.22 in 2010.

Long Beach/Downey: Trend projects an additional 91,200 housing units and 176,700 jobs over the 1984-2010 period. This level of employment growth creates a job-rich subregion by the year 2010. As a result of the J/H Forecast computations, 12,300 housing units are added and employment growth is reduced by 27,100 jobs (unless job/housing balance is achieved through mitigation efforts). J/H Forecast would lower the job/housing ratio from 1.34 under Trend to 1.26.

Northwest Orange: Housing and employment is projected to grow by 122,200 units and 308,400 jobs between 1984 and 2010 under the Trend

Projection. In 1984, this subregion was job-rich (1.34), and with the continuing high levels of employment growth under Trend it is projected to become more job-rich (1.57). The J/H Forecast, which incorporates job/housing balance policies, adds an addition 26,000 units to the Trend Projection and lowers employment growth by 47,000 jobs, resulting in the drop of the job/housing ratio to 1.44 by the year 2010 (unless job/housing balance is achieved through mitigation efforts).

2. Urbanizing Subregions

Oxnard/Ventura: Under the Trend Projection, housing grows by 66,900 units and employment by 83,500 jobs between 1984 and 2010. The J/H Forecast computations lowers both housing and job growth by 4,600 and 7,100 respectively, (unless growth is mitigated to achieve job/housing balance) thus creating job/housing balanced subregion of 1.22 in the year 2010.

Simi/Thousand Oaks: The Trend Projection adds 78,600 units and 66,500 jobs over the 1984-2010 period. Trend projects this subregion to continue to be a housing-rich (0.83). However, with J/H Forecast computations, housing growth is lowered (unless mitigated) by 5,400 units and employment increased by 9,700 jobs over the Trend Projection. This results in the job/housing ratio increasing to 0.93.

Santa Clarita Valley: Trend projects an additional 65,100 units and 90,000 jobs between 1984 and 2010. Under the J/H Forecast, unless mitigated towards attainment of job/housing balance, both housing and employment growth is lowered relative to the Trend Projection (4,500 units and 6,200 jobs). This results in a job/housing ratio of 1.19 -- an improvement over the 1984 ratio of 0.80.

Santa Monica Mountains: Trends projects an additional 23,100 units and 31,800 jobs during the 1984-2010 period, creating an even greater job/housing imbalance (housing-rich) subregion than in 1984. However, the J/H Forecast computations slows housing growth (unless mitigated) and encourages employment growth, thus improving the job/housing balance of the subregion from a 1984 ratio of 0.62 to 0.74 in the year 2010.

West San Bernardino Valley: Under the Trend Projection, 202,500 units and 372,000 jobs are added to the subregion between 1984 and 2010. This results in an improvement in the job/housing ratio from 0.99 in 1984 to 1.10 by the year 2010 -- balance for the region is 1.22. The J/H Forecast improves the balance even more to 1.15 by lowering housing growth (unless mitigated) by 13,900 units and increasing employment growth by 1,500 jobs over the Trend Projection.

East San Bernardino Valley: Trend projects an additional 189,600 units and 84,000 jobs between 1984 and 2010. The Trends Projection shows job/housing balance becoming worse by the year 2010 -- dropping from 0.93 in 1984 to 0.63 by 2010. The J/H Forecast lowers housing growth by 13,000 units (unless mitigated) and raises employment

growth by 50,800 jobs over the Trend Projection, thus bringing the job/housing ratio to 0.84 -- still well below the regional balance ratio of 1.22.

Riverside/Corona: The Trend Projection adds 204,700 units and 77,200 jobs to this subregion over the 26 year period between 1984 and 2010. As a housing-rich subregion in 1984 (1.03), it becomes even more housing-rich by 2010 under Trend (0.63). However, the job/housing policy under the J/H Forecast reallocates an additional 59,800 jobs to this subregion and lowers housing growth (unless mitigated) by 14,100 units, improving the job/housing ratio to 0.84.

Central Riverside: Trends projects an additional 167,600 units and 96,800 jobs between 1984 and 2010. This improves the job/housing balance slightly from 0.45 in 1984, to 0.53 in 2010. Under the J/H Forecast, 11,700 housing units (unless housing growth is mitigated) are reallocated to other housing-poor subregions and 36,900 jobs are added to the employment growth, improving the job/housing ratio to 0.71 -- still the most housing-rich subregion of all the Urban and Urbanizing subregions.

Southeast Orange: Trend projects a housing growth of 510,000 units and an employment growth of 450,700 jobs between 1984 and 2010. But employment growth is projected at a much faster rate than housing growth, thus aggravating the job/housing imbalance (1.45 in 1984 to 1.60 in 2010). The J/H Forecast procedure improves the job/housing balance (1.40) by projecting 27,300 more housing units and 68,200 fewer jobs than the Trend Projection (unless impact of job growth is mitigated towards attainment of better job/housing balance).

3. Mountain and Desert Subregions

North Los Angeles: The Trend Projection shows 189,500 housing units and 93,700 jobs growing in this subregion between 1984 and 2010. Like most of the Desert subregions, this housing-rich subregion in 1984 (j/h ratio: 0.71) is even more unbalanced in 2010 under the Trend Projection (0.54). The J/H Forecast procedure diverts 47,000 jobs to the North Los Angeles subregion and reduces the housing growth (unless mitigated) by 13,000 units. Although still housing-rich, the job/housing balance ratio for the year 2010 (0.78) is improved.

San Bernardino Forest: Under the Trend Projection, housing grows by 90,800 units and employment by 3,500 jobs over the 1984-2010 period. The job/housing balance convergence procedure allocates 14,800 more jobs and reduces the housing growth (unless mitigated) of this subregion by 6,100 units. The Trend Projection job/housing ratio of 0.09 is thus improved to 0.21.

San Bernardino Desert: Trend projects 122,800 units of housing and 37,700 jobs between 1984 and 2010. To ameliorate the Trend job/housing ratio (0.41 to 0.60) in this subregion, the J/H Forecast convergence procedure allocates 34,500 more jobs while reducing the housing units growth (unless mitigated) by 8,300 units.

Riverside Desert: Trend projects an additional 142,400 housing units and 88,900 jobs over the 1984-2010 period. The 1984 job/housing ratio of .71 declines to .66 under the Trend projection. The job/housing balance computations add 15,100 jobs and reduce the housing growth of this subregion by 9,600 units (unless mitigated) , resulting in a more balanced job/housing ratio of 0.75.

Idylwild: Under Trend, more jobs are projected than housing units (4,800 vs. 4,300 respectively). Trend helps improves the job/housing ratio from 0.27 in 1984 to 0.64 in 2010. By decreasing the housing growth in this subregion by 300 units the job/housing balance convergence procedure further improves the job.housing ratio (0.66).

Imperial: The Trend Projection shows an increase in housing by 15,800 units and employment by 33,800 jobs over the 26 year period. Of all the subregions, the county of Imperial is the only one to switch from housing-rich to job-rich between 1984 and 2010 (1.11 and 1.44 respectively). Under the J/H Forecast 5,200 jobs are diverted out of the subregion and 2,700 dwelling units are added, resulting in an improved job/housing balance ratio of 1.26 (still job-rich).

Table VII-1

GMA-4 MOD. J/H
POPULATION

	1984	1988	GMA-4 MOD TREND 2010	GMA-4 MOD TREND 84-2010	GMA-4 MOD J/H 2010	GMA-4 MOD J/H 84-2010	DIFF. GMA-4 MOD J/H-TREND 2010
SAN FERNANDO VAL	1177400	1272400	1572000	394600	1593900	416500	21900
GLENDALE/PASADENA	1202200	1283300	1432100	229900	1412000	209800	-20100
EAST S. GABRIEL VAL.	739300	820500	1100500	361200	1071500	332200	-29000
SANTA MONICA BAY	1297400	1387000	1547500	250100	1606400	309000	58900
CENTRAL LOS ANGELES	2102000	2288100	2304400	202400	2354500	252500	50100
LONG BEACH/DOWNEY	1075800	1153300	1280900	205100	1312100	236300	31200
NORTHWEST ORANGE	1425200	1502500	1655300	230100	1722500	297300	67200
URBAN	9019300	9707100	10892700	1873400	11072900	2053600	180200
OXNARD/VENTURA	370600	385700	523100	152500	510600	140000	-12500
SIMI/THOUSAND OAKS	208900	251200	420100	211200	404100	195200	-16000
SANTA CLARITA VAL.	89200	95100	254700	165500	242400	153200	-12300
SANTA MONICA MTS.	58100	88400	110200	52100	106400	48300	-3800
WEST S. BERN. VAL.	401100	504700	895900	494800	858200	457100	-37700
EAST S. BERN. VAL.	379400	453100	804200	424800	772400	393000	-31800
RIVERSIDE CORONA	378100	469100	871000	492900	833800	455700	-37200
CENTRAL RIVERSIDE	195800	237100	582800	387000	555900	360100	-26900
SOUTHEAST ORANGE	641300	736300	1196600	555300	1259700	618400	63100
URBANIZING	2722500	3220700	5658600	2936100	5543500	2821000	-115100
LOS PADRES	500	500	500	0	500	0	0
NORTH LOS ANGELES	118900	165700	560900	442000	529600	410700	-31300
ANGELES FOREST	2400	2200	2400	0	2400	0	0
S. BERN. FOREST	41900	53500	122700	80800	117100	75200	-5600
S. BERN. DESERT	192100	228700	450000	257900	431700	239600	-18300
RIVERSIDE DESERT	176800	232300	424100	247300	407100	230300	-17000
IDYLWILD	6800	7600	11700	4900	11300	4500	-400
IMPERIAL	101700	111100	133100	31400	140200	38500	7100
MNTS/DESERTS	641100	801600	1705400	1064300	1639900	998800	-65500
REGION	12382800	13729400	18256300	5873500	18256300	5873500	0
COUNTIES							
IMPERIAL	101700	111100	133100	31400	140200	38500	7100
LOS ANGELES	7862700	8555900	10165600	2302900	10231200	2368500	65600
ORANGE	2066400	2238800	2851900	785500	2982200	915800	130300
RIVERSIDE	757500	946100	1889600	1132100	1808100	1050600	-81500
SAN BERNARDINO	1014500	1240000	2272800	1258300	2179300	1164800	-93500
VENTURA	580000	637400	943700	363700	915200	335200	-28500
REGION	12382800	13729300	18256300	5873500	18256300	5873500	0

Table VII-2

GMA-4 MOD. J/H
HOUSING

	1984	1988	GMA-4 MOD TREND 2010	GMA-4 MOD TREND 84-2010	GMA-4 MOD J/H 2010	GMA-4 MOD J/H 84-2010	DIFF. GMA-4 MOD J/H-TREND 2010
SAN FERNANDO VAL	454000	475100	633700	179700	643000	189000	9300
GLENDALE/PASADENA	442500	456200	544300	101800	537100	94600	-7200
EAST S. GABRIEL VAL.	233000	247900	364400	131400	355100	122100	-9300
SANTA MONICA BAY	519200	537400	641200	122000	666100	146900	24900
CENTRAL LOS ANGELES	777100	826200	878300	101200	898100	121000	19800
LONG BEACH/DOWNEY	400000	414600	491200	91200	503500	103500	12300
NORTHWEST ORANGE	506000	536600	628200	122200	654200	148200	26000
URBAN	3331800	3494000	4181300	849500	4257100	925300	75800
OXNARD/VENTURA	129600	135500	196500	66900	191900	62300	-4600
SIMI/THOUSAND OAKS	66800	82200	145400	78600	140000	73200	-5400
SANTA CLARITA VAL.	29200	29300	94300	65100	89800	60600	-4500
SANTA MONICA MTS.	21300	30200	44400	23100	42900	21600	-1500
WEST S. BERN. VAL.	134100	171100	336600	202500	322700	188600	-13900
EAST S. BERN. VAL.	145800	175300	335400	189600	322400	176600	-13000
RIVERSIDE CORONA	130400	160900	335100	204700	321000	190600	-14100
CENTRAL RIVERSIDE	89200	108300	256800	167600	245100	155900	-11700
SOUTHEAST ORANGE	254000	292800	510400	256400	537700	283700	27300
URBANIZING	1000400	1185600	2254900	1254500	2213500	1213100	-41400
LOS PADRES	300	300	300	0	300	0	0
NORTH LOS ANGELES	46100	64900	235600	189500	222600	176500	-13000
ANGELES FOREST	1100	1100	1100	0	1100	0	0
S. BERN. FOREST	43600	57600	134400	90800	128300	84700	-6100
S. BERN. DESERT	85000	100000	207800	122800	199500	114500	-8300
RIVERSIDE DESERT	100800	134400	243200	142400	233600	132800	-9600
IDYLWILD	5600	6600	9900	4300	9600	4000	-300
IMPERIAL	33400	35700	49200	15800	51900	18500	2700
MNTS/DESERTS	315900	400600	881500	565600	846900	531000	-34600
REGION	4648300	5080200	7317500	2669200	7317500	2669200	0
COUNTIES							
IMPERIAL	33400	35700	49200	15800	51900	18500	2700
LOS ANGELES	2923600	3082700	3928500	1004900	3959300	1035700	30800
ORANGE	760100	829400	1138600	378500	1191900	431800	53300
RIVERSIDE	326000	410200	845000	519000	809300	483300	-35700
SAN BERNARDINO	408600	504000	1014200	605600	972900	564300	-41300
VENTURA	196600	218000	342200	145600	332200	135600	-10000
REGION	4648300	5080000	7317500	2669200	7317500	2669200	0

Table VII-3

GMA-4 MOD. J/H
EMPLOYMENT

	1984	GMA-4 MOD TREND 2010	GMA-4 MOD TREND 84-2010	GMA-4 MOD J/H 2010	GMA-4 MOD J/H 84-2010	DIFF. GMA-4 MOD J/H-TREND 2010
SAN FERNANDO VAL	580900	851100	270200	809800	228900	-41300
GLENDALE/PASADENA	485400	616800	131400	616200	130800	-600
EAST S. GABRIEL VAL.	239300	389800	150500	391600	152300	1800
SANTA MONICA BAY	759500	1058100	298600	1012500	253000	-45600
CENTRAL LOS ANGELES	1435300	1677200	241900	1639500	204200	-37700
LONG BEACH/DOWNEY	482600	659300	176700	632200	149600	-27100
NORTHWEST ORANGE	680200	988600	308400	941500	261300	-47100
URBAN	4663200	6240900	1577700	6043300	1380100	-197600
OXNARD/VENTURA	158600	242100	83500	235000	76400	-7100
SIMI/THOUSAND OAKS	54300	120800	66500	130500	76200	9700
SANTA CLARITA VAL.	23400	113400	90000	107200	83800	-6200
SANTA MONICA MTS.	13200	26700	13500	31800	18600	5100
WEST S. BERN. VAL.	132800	370500	237700	372000	239200	1500
EAST S. BERN. VAL.	135500	219500	84000	270300	134800	50800
RIVERSIDE CORONA	133900	211100	77200	270900	137000	59800
CENTRAL RIVERSIDE	39800	136600	96800	173500	133700	36900
SOUTHEAST ORANGE	367800	818500	450700	750300	382500	-68200
URBANIZING	1059300	2259200	1199900	2341500	1282200	82300
LOS PADRES	100	100	0	100	0	0
NORTH LOS ANGELES	32700	126400	93700	173800	141100	47400
ANGELES FOREST	600	600	0	600	0	0
S. BERN. FOREST	8600	12100	3500	26900	18300	14800
S. BERN. DESERT	48000	85700	37700	120200	72200	34500
RIVERSIDE DESERT	71800	160700	88900	175800	104000	15100
IDYLWILD	1500	6300	4800	6300	4800	0
IMPERIAL	37000	70800	33800	65600	28600	-5200
MNTS/DESERTS	200300	462700	262400	569300	369000	106600
REGION	5922800	8962800	3040000	8954100	3031300	-8700
COUNTIES						
IMPERIAL	37000	70800	33800	65600	28600	-5200
LOS ANGELES	4053000	5519400	1466400	5415200	1362200	-104200
ORANGE	1048000	1807100	759100	1691800	643800	-115300
RIVERSIDE	247000	514700	267700	626500	379500	111800
SAN BERNARDINO	325000	687800	362800	789400	464400	101600
VENTURA	213000	363000	150000	365600	152600	2600
REGION	5923000	8962800	3039800	8954100	3031100	-8700

Table VII-4

GMA-4 MOD. J/H
JOB/HOUSING BALANCE RATIOS

	1984	GMA-4 MOD TREND 2010	GMA-4 MOD J/H 2010
SAN FERNANDO VAL	1.28	1.34	1.26
GLENDALE/PASADENA	1.10	1.13	1.15
EAST S. GABRIEL VAL.	1.03	1.07	1.10
SANTA MONICA BAY	1.46	1.65	1.52
CENTRAL LOS ANGELES	1.85	1.91	1.83
LONG BEACH/DOWNEY	1.21	1.34	1.26
NORTHWEST ORANGE	1.34	1.57	1.44
URBAN	1.40	1.49	1.42
OXNARD/VENTURA	1.22	1.23	1.22
SIMI/THOUSAND OAKS	0.81	0.83	0.93
SANTA CLARITA VAL.	0.80	1.20	1.19
SANTA MONICA MTS.	0.62	0.60	0.74
WEST S. BERN. VAL.	0.99	1.10	1.15
EAST S. BERN. VAL.	0.93	0.65	0.84
RIVERSIDE CORONA	1.03	0.63	0.84
CENTRAL RIVERSIDE	0.45	0.53	0.71
SOUTHEAST ORANGE	1.45	1.60	1.40
URBANIZING	1.06	1.00	1.06
LOS PADRES	0.33	0.33	0.33
NORTH LOS ANGELES	0.71	0.54	0.78
ANGELES FOREST	0.55	0.55	0.55
S. BERN. FOREST	0.20	0.09	0.21
S. BERN. DESERT	0.56	0.41	0.60
RIVERSIDE DESERT	0.71	0.66	0.75
IDYLWILD	0.27	0.64	0.66
IMPERIAL	1.11	1.44	1.26
MNTS/DESERTS	0.63	0.52	0.67
REGION	1.27	1.22	1.22
COUNTIES			
IMPERIAL	1.11	1.44	1.26
LOS ANGELES	1.39	1.40	1.37
ORANGE	1.38	1.59	1.42
RIVERSIDE	0.76	0.61	0.77
SAN BERNARDINO	0.80	0.68	0.81
VENTURA	1.08	1.06	1.10
REGION	1.27	1.22	1.22

CHAPTER VIII

GROWTH MANAGEMENT PLAN
PROPOSED IMPLEMENTATION PROCESS

A. INTRODUCTION

This chapter outlines a proposed collaborative effort for implementing the job/housing balance policy. It drafts the successive sets of actions to be undertaken to promote job/housing balance and to support the regional Air Quality and Mobility Plan objectives.

Job/housing Balance, as a growth management policy is not a new concept. Several jurisdictions within the region have recognized the benefits of balancing the number and type of jobs with the amount and cost of housing as one way of reducing commute distances and emissions of air pollutants.

The State housing law regulating the development of the Regional Housing Needs Assessment explicitly mentions job/housing balance as a criterion to be taken into account in development of local future housing needs assessments.

The proposed Air Quality Management Plan includes transportation, land use and energy conservation measures aimed at reducing air pollution and conserving the environment. The land use measures focus on job/housing balance. The Draft Air Quality Plan recognizes the regional benefits of implementing measures that would contribute to shorter work trips and lower emissions.

The Regional Mobility Plan proposed preferred alternative incorporates implementation of job/housing balance measures, and highlights the resulting reduction of congestion and improvements on the transportation system.

The implementation strategy described below identifies agencies responsible for carrying out the proposed action(s) and a proposed time schedule. It is based on the **voluntary** participation of local jurisdictions. It also involves existing regional and state agencies, various private sector interest groups, as well as the formation of subregional entities similar in concept to those in the existing transportation policy steering committees.

The initial phase of the implementation process entails planning and implementing job/housing balance measures, monitoring and progress assessment. Additional actions can be considered if it is estimated, towards the end of the first 5 year period, that job/housing balance targets will not be met.

The proposed recommended implementation program is based on the following premises:

1. Implementation is carried through by existing authorities;

2. Implementation is guided by presently available regulatory measures;

3. Implementation presupposes the voluntary participation of local jurisdictions in the planning and implementation of the process;

4. Implementation through incremental legislative and regulatory actions can be considered if local actions fail; and

5. Implementation is consistent with the timeline proposed in the AQMP.

B. THE IMPLEMENTATION PROCESS

Implementation of the Growth Management Plan entails an outreach effort, the development of job/housing balance targets and measures to attain them, as well as a monitoring and reassessment system.

1. Outreach

As demonstrated in chapters V and VI of the Growth Management Plan, implementation of the job/housing balance policy and attainment of set targets at the subregional level can result in substantial improvements of the transportation system. Distance traveled and commute time can be reduced to more manageable levels, air pollution and congestion costs can be decreased. It is therefore imperative to put in place an outreach and information system, whereby the benefits of achieving job/housing balance are widely disseminated. A far-reaching educational effort is necessary to muster regionwide support for the job/housing balance policy.

SCAG's responsibility, with the assistance of **Subregional Entities**, is to design and carry through an outreach program intended to promote the advantages of attaining job/housing balance targets. **SCAG** can reach the general public and local jurisdiction officials by broadly advertising the possible gains, at the regional and local level, of job/housing balance implementation.

[**Subregional Entities** are envisioned as groups of representatives from local governments, public and private interest groups within a subregion, which meet in a formal setting to participate in the job/housing balance implementation process. Such formal entities can be modeled along existing work groups, such as the Transportation Area Study Policy Committees or the Coachella Valley Association of Governments.]

2. Development of Job/Housing Balance Targets

With the assistance of **Local Jurisdictions** and **Subregional Entities**, **SCAG** develops for each subregion, and for local jurisdictions,

job/housing balance targets in 5 year increments. The basis for computations is the GMA4-Mod J/H 2010 distribution of jobs and housing units by subregion. Cities within a subregion, with the participation of subregional entities if they so elect, can trade targets as long as the subregional allocations are maintained.

3. Development of Local Measures

Local jurisdictions select the measures necessary for the achievement of job/housing balance targets. Several options can be considered to tailor the course of action to the jurisdiction's situation.

SCAG's task is to develop a menu of actions that can be undertaken at the local level to support the job/housing balance objectives. Appendix 1 of the Growth Management Plan suggests a list of optional measures which can be pursued by local authorities.

Other responsibilities of **SCAG** at this stage of the implementation process are to provide technical assistance and advice to cities in the development of general plans that incorporate the regional and local job/housing balance objectives; to act as clearinghouse for the drafting of ordinances for the implementation of job/housing balance; to design model ordinances to fit different local conditions.

Local Jurisdictions, in collaboration with **Subregional Entities**, can enter into inter-governmental agreements whereby they exchange targets and negotiate mutually acceptable provisions spelling out responsibilities and benefits distribution.

4. Monitoring

With the assistance and review of **Local Jurisdictions** and **Subregional Entities**, **SCAG** develops a consistent and replicable evaluation system to assess, on a yearly basis, progress in meeting subregional job/housing balance goals. The monitoring process should be structured so as to exclude projects that are exempt from the review and implementation process.

5. Implementation

Local Jurisdictions should develop general plans that incorporate regional and local job/housing balance objectives as well as elements of the Air Quality and Regional Mobility Plans. Local Jurisdiction adoption of measures and ordinances that foster job/housing balance is targeted for January 1, 1990.

SCAG's task is to promote implementation of the job/housing balance policy. The A-95 Review program is a vehicle through which the agency can review projects and make recommendations for federal funding. **SCAG** can influence the issue of federal resources to a project which adversely impacts the job/housing balance in a subregion. The Transportation Improvement Program is another mechanism that can be used by the agency. SCAG can recommend that funds for transportation projects be consistent with the objectives

of the job/housing balance policy.

County Transportation Commissions can participate in the implementation process through programming of transportation funds. By making revisions to the New Source Review Rule, the **South Coast Air Quality Management District** can influence the location of proposed commercial and industrial projects in a way that enhances the objectives of job/housing balance and eases attainment of subregional targets.

The **State Housing and Community Development Department**, through the Regional Housing Needs Assessment reviews, can affect the housing elements of local general plans.

6. Assessment of Consistency with Targets

Job/housing balance implementation guidelines should take into account differences among subregions, and within a subregion differences among local jurisdictions. The following are proposed evaluation criteria:

- o Projects which should be exempt from the review and mitigation process are proposals for low income housing, for senior citizen housing and proposals to add needed jobs in economically depressed areas.

- o Projects which would add jobs or housing in a local jurisdiction within the job/housing balance targets are handled by the normal permitting process.

- o Projects which the local jurisdiction wishes to approve but which exceed local targets and contribute to job/housing imbalance at the subregional level could require conditional permits until mitigation measures that bring the subregional job/housing balance within the targeted ratio are met.

  In job-rich subregions, local jurisdictions could grant permits to projects that lead to an excess of jobs over the target allocation on the condition that mitigation measures insuring housing development and/or balance promoting infrastructure improvements are met. Since the implementation process would allow local jurisdictions within a subregion to negotiate targets and measures, additional housing units could be developed within the local jurisdiction or in other areas within the subregion. Public or private developers of commercial and industrial projects also have the option of bringing economic development to a job-poor subregion, or housing development to another job-rich subregion, as a mitigation action.

  In housing-rich subregions, local jurisdictions could grant permits to projects that lead to an excess of housing over the target allocation on the condition that mitigation measures insuring economic development and/or balance promoting infrastructure improvements are met. Private housing developers

could create in the jurisdiction, or in other jurisdictions within the subregion, an amount of jobs that would restore the subregional job/housing targeted ratio. Another mitigation option would be to develop needed housing in another housing-poor subregion or jobs in another housing-rich subregion.

- o **Housing projects** in **job-rich** subregions and **job development** projects in **housing-rich** subregions should not be subject to review and conditional permitting as long as they contribute to further balancing at the subregional level. Such projects should be encouraged and granted additional incentives.

7. Reassessment

If by January 1, 1994, it is estimated, through the monitoring process, that the job/housing balance targets at the subregional level will not be met, the targets, and measures to attain them, could be reassessed. By that time, data from the 1990 Census will be available and will provide a benchmark for the re-evaluation of subregional job/housing balance targets.

For areas where it is assessed that job/housing imbalance has worsened, additional implementation measures could be considered. **SCAG**, in cooperation with **Local Jurisdictions, Subregional Entities**, and **SCAQMD** could revise the implementation measures to be applied. For example, after January 1, 1994, **SCAQMD** could potentially develop more stringent provisions of and more vigorously enforce an Indirect Source Rule and New Source Review.

Likewise, the **Regional Water Control Boards** could expand the application of the National Pollutant Discharge Elimination System. Sewer hookup and discharge permits could be denied for projects that lead to further deterioration of the job/housing balance in an area.

The **State HCD** could play a stronger role in the determination of whether housing needs in a subregion are met and require stricter implementation of the housing laws; this could result in further review of housing laws.

Other potential actions could include State reviews of laws governing local general plans, and recommended changes to existing redevelopment laws, if deemed appropriate.

C. LOCAL GOVERNMENT IMPLEMENTATION MEASURES

The following are some of the measures that could be pursued by local jurisdictions towards the attainment of job/housing balance targets.

- o For proposals that worsen the job/housing balance in a subregion, require mitigation measures to be borne by the project.

- o Establish regional and local priorities for building the infrastructure needed to support job/housing balance.

- Locate new major regional and local public facilities (such as airports, industrial parks, shopping centers etc.) that are job-inducing in job-poor subregions and housing-inducing in housing-poor subregions.

- Target basic industries. This is a tool which can be used by job-poor localities to identify growing industries and attract them by providing the proper incentives, such as tailoring their economic activities to the industries' requirements.

- Develop human resources through education and training of workers so businesses can rely on a appropriate labor force if they want to locate in certain areas.

- Encourage housing development in job-rich subregions in accordance with allocations in the regional housing needs assessment by providing developers with additional incentives.

- Reduce housing construction limitations in job-rich areas.

- Link the transportation demand management measures to the job/housing balance measures.

Local Jurisdictions can choose from a variety of other job/housing balance implementation measures as outlined in Appendices 1 and 2 of the Growth Management Plan.

PRELIMINARY

APPENDIX 1

ISSUES AND ACTION PAPER II-A

A PARTIAL MENU OF ACTIONS THAT COULD BE CONSIDERED TO IMPLEMENT JOB/HOUSING BALANCE

APPENDIX 1

A PARTIAL MENU OF MEASURES THAT COULD BE CONSIDERED TO IMPLEMENT JOB/HOUSING BALANCE

What follows are various ideas that have been generated to date on achieving job/housing balance. The purpose is to present a list of optional measures and actions which can be implemented by local jurisdictions and existing regional and state agencies without making specific recommendations. The final authority in selection of applicable measures rests with local jurisdictions. Furthermore, "regulatory" measures are marked with an asterisk (*). Some of them require implementation by a regional or state authority and/or legislative changes and could be considered, whenever deemed necessary, only in the second phase of the implementation process as suggested in chapter VII of this report.

1. Exactions:

   Impose developer fees on housing developments and commercial and industrial projects to cover the external costs associated with imbalanced development. The funds collected from these fees would go toward conducting economic development activities in job-poor subregions; and facilitating housing development in housing-poor subregions. Economic developments in job-poor subregions and housing projects in housing-poor subregions would be exempt.

   The use of exactions or developer fees to help pay for needed infrastructure is a widely-used technique. Programs to this end exist in almost every county in the region. Particular examples include "public facility" fees in Riverside County and the Transportation/Land Use Ordinance of Los Angeles City. In this ordinance where commercial and industrial developments are required to pay exactions that go toward improving the transportation facilities of the immediate area. The proposal outlined above differs from these approaches primarily in terms of scale. In addition to requiring development to mitigate the transportation impacts upon the immediate area, the imbalanced development would also have to contribute towards the mitigation of **region-wide** impacts.

   These exactions could be enacted and the funds dispersed by a variety of existing agencies or possible new agencies: local governments (acting independently or through inter-jurisdictional agreements); special districts; a regional joint-powers authority; and/or the state.

2. Use of Local Police Powers*:

Revise local police powers so as to encourage regional job/housing balance. These revisions could be done voluntarily, as a prerequisite for receipt of state or federal funds, as a requirement of the Regional Air Standards Attainment Plan, and/or as a new requirement of state law.

In order to improve the region's transportation system, and air quality balance is needed only at the subregional-scale; balance at the smaller city-scale, in most cases, is not necessary. However, in order to implement this action, local police powers are needed. Therefore, a system would have to be designed which translated subregional targets to the city level, so each jurisdiction would know what its responsibilities are.

Implementation could be done through such techniques as establishing a standard for level of job/housing balance as a prerequisite for the approval of new commercial or industrial developments in job-rich subregions. Local jurisdictions could issue ordinances that foster job/housing balance.

Zoning and General Plans in job-rich subregions could be re-drafted or down-zoned so as to limit commercial and industrial development to whatever level is needed in order to achieve balance. Zoning and general plans can also be revised to encourage accessory units, granny-flats, unit splits, and mixed-use development.

Zoning in housing-rich subregions could be changed to require a minimum level of job/housing balance as a condition for approval of large, non-contiguous residential developments.

Local police powers are increasingly being used throughout the United States and Southern California as a means to shape growth. For example, in 1982 Montgomery County, Maryland, enacted an "adequate public facilities ordinance" structured to assure a match between growth and "levels of service" of the county's infrastructure systems. In Florida, local governments are being required by state law to revise their General Plans and zoning ordinances so as to control growth in such a way as to meet state established goals. In Oregon, localities are required to designate urban limit lines, and to limit development outside these lines.

Within California, a large number of jurisdictions, including San Diego, have enacted ordinances that limit the number of building permits that can be issued each

year. Within this region, at least 12 jurisdictions (most are within Ventura County) have formal growth-limitation programs. A larger number of jurisdictions are currently considering enacting new growth control programs.

This program is geared toward managing growth instead of limiting growth.

A detailed analysis of use of local police powers prepared by Sedway Cooke Associates is contained in Appendix 2 under the heading of "Regulatory Strategy", pages...

3. Enterprise Zones:

California has had a California Enterprise Zone Program since 1984. Five localities in the SCAG region have qualified for enterprise-zone status and are targeted to be recipients of state and local tax advantages aimed at encouraging economic activities and hiring of the unemployed. This action calls for an expanded effort geared at the entire job-poor portion of the SCAG region.

Tools used to encourage business development in enterprise zones include income tax credits for hiring the unemployed, sales tax credits for new equipment purchases, tax-exempt bond financing, targeting of existing financing programs such as Small Business Administration Loans, employer wage credits, investment income exclusion, exemption from preparation of state environmental impact reports and job training priorities. Such actions are intended to attract new business investments, and to provide businesses already operating in the areas with economic impetus for expansion.

California is among 25 states with enterprise zone programs. Most states and localities are focusing on business retention and relocation of businesses from more prosperous outlying areas to the enterprise zone. Note that this proposal would be quite different; jobs would be encouraged to locate in outlying areas. In most enterprise-zone programs the state designates the zones and the local governments ensure that zone residents and firms comply with program requirements to benefit from state incentives.

Regional councils of government have had a role in providing information and assistance for successful implementation and operation of the enterprise zones. The services of regional councils have included data collection and analysis, job-training assistance, marketing and referral services, business development and capital improvement financing. In addition, many regional councils provide review and comment assistance for state and local governments. Regional councils have also

assisted firms in locating in enterprise zones and in obtaining low-interest or revolving loans and other financing. Many regional councils have been instrumental in planning and implementing revitalization strategies and monitoring state regulations governing the enterprise.

The following are examples of regional councils involved in these activities: the Greater Bridgeport Regional Planning Agency in Connecticut, the Capitol Regional Council of Governments in Hartford, the Toledo Metropolitan Area Council of Governments, The West Piedmont Planning District Commission, and the Northern Illinois Planning Commission.

4. Infrastructure Funding*:

a. Establish regional priorities for building the infrastructure that will be needed in this region to support the projected job-growth. Give high priority to those projects that would tend to stimulate job growth in job-poor areas. Establish a process (a regional infrastructure funding pool or bank, a regional Capital Improvement Program, and/or a set of inter-governmental agreements) to assure that these priorities are reflected in actual funding programs. **Design this process to assure that it incorporates the capital improvement programs of the numerous special districts within the region.**

b. Fund projects **only** to a level that would foster the amount of employment growth shown in regional targets for job-rich areas. Incorporate this requirement into all of SCAG's plans and A-95 Reviews. The implementation of this policy would directly impact transportation projects. Through the Regional Air Quality Plan, it potentially could impact **all** other projects. Seek state legislation that would reinforce this approach.

c. In SCAG's transportation planning effort, elevate the priorities on transportation projects and systems that encourage economic development in job-poor subregions.

d. Establish regional priorities for those systems (schools, parks, social services, residential sewers, etc.) that foster housing development in job-rich subregions. Enhance or elevate the funding priority for projects in those job-rich subregions (such as the Regional Core) where there is a clear shortfall in these systems. Include such a criterion in SCAG's own plans and recommendations on funding priorities, and work with state and federal agencies to do likewise.

e. To redirect job growth to housing rich subregions, establish a process (a regional infrastructure funding pool or bank, and/or a Regional Capital Improvement

Program, and/or a set of inter-agency agreements) to fund priority projects. Incorporate the capital improvement programs of special districts into this process. (The developer fees collected could be used for this housing-related infrastructure.)

Structuring government infrastructure programs so as to shape the pattern and timing of growth is a technique well-used throughout the nation. Perhaps the better-known examples are programs in Ramapo, New York, and Montgomery County, Maryland.

Within Southern California, a SCAG survey conducted in 1984 shows that at least 29 local jurisdictions are explicitly using this technique as a growth management technique. In fact, this approach has been basic to SCAG's Development Guide Program for over 15 years. What is different about the approach proposed above is the expanded emphasis to the regional level.

5. Location of New Major Public Facilities:

   Make every attempt to locate new major public facilities (such as universities, airports, governmental servicing operations and trade centers) that are job-inducing in job-poor subregions.

6. Incentive measures:

   Streamline the review and approval process for commercial and industrial development projects in job-poor subregions; in job-rich subregions streamline the review and approval process for residential developments/-re-developments.

   Provide incentives (such as eliminating or reducing developer fees) to encourage developers to build housing in job-rich subregions and commercial and industrial facilities in job-poor subregions.

   Remove limitations on commercial and industrial development and develop local economic plans in job-poor subregions.

7. Telecommunications:

   Establish an environment which supports and encourages the installation and use of telecommunications equipment. Incorporate this objective in local and regional plans and actions.

   Telecommunications technology has the potential to foster greater decentralization of economic activity in the region. As property in job-rich areas becomes more

expensive and as congestion increases, it probably becomes increasingly cost effective for businesses to locate certain activities in the outlying, job-poor subregions of the region. This potential can be reinforced with an extensive and active telecommunications network.

8. Targeting basic industries:

   This involves identification of potential growth industries and provision of incentives for attracting them. It requires determining the local characteristics these industries consider in making decisions on where to locate or expand. It also identifies the means through which localities in job-poor subregions can tailor their economic development activities to best match these characteristics.

9. Human Resource Development:

   Provide education, training and support services to the resident labor force, so business can count on a ready and appropriate supply of labor.

10. Attraction of Foreign Capital Investment:

    Cities in job-poor subregions, possibly along with SCAG, would work with foreign companies to learn what they are seeking when considering locating in the U.S. This knowledge would then be used so as to capitalize upon any advantage that the communities might have (such as a large immigrant population), or to create new opportunities geared toward foreign capital investment needs.

11. Reduction of Housing Limitations*:

    As a prerequisite for regional support for continued employment growth, require jurisdictions in job-rich areas to reduce limitations (other than those for public health and safety) that would restrict housing development to a level below that shown in regional targets. Incorporate this logic into the Regional Housing Needs Assessment. Establish this as a condition for a determination of consistency with regional plans, and use any regulatory powers associated with these plans to enforce. Seek state legislation to mandate.

12. Allocation of State and Federal Economic Development Funds:

    A regional pool of state and federal economic development funds could be established. Their expenditure could then be directed toward promoting job growth in job-poor subregions. However, this has the potential to aggravate

conditions within the existing economically-distressed areas of the older portions of the region. In order to avoid this unwanted side-effect, economic development funds could also be geared toward: helping residents of economically distressed areas relocate to the areas where the new job opportunities are occurring; and within job-rich subregions, targeting economic development funds toward only those types of jobs that would match the skills of the unemployed or under-employed residents of that subregion.

13. Requirements for Incorporation:

    Local Agency Formation Commission (LAFCO's) could require consistency with regional job/housing balance objectives as a prerequisite for incorporation.

14. Industrial and Housing Development Bonds*:

    Seek legislative changes to raise the current limits on Industrial Development Bonds within housing-rich subregions. Seek legislative changes that would expand housing redevelopment bond authority within job-rich subregions.

15. Environmental Regulations*:

    Revise local and state regulations in such a way as to support job/housing balance. For example, the New Source Review Rule of the South Coast Air Quality Management District (SCAQMD) could be revised to take into account air quality benefits from job-housing balance (so as to favor employment development in job-poor subregions). This could be taken further by using the regulatory powers associated with the Regional Air Standards Attainment Plan over indirect sources of pollution to achieve job/housing balance objectives. Another potential area is CEQA: regional job/housing balance could be specifically assessed.

16. Redevelopment*:

    Seek changes to state redevelopment laws so as to require consistency between future redevelopment activities and regional job/housing balance objectives. Specifically, prohibit redevelopment activities in job-rich subregions that would contribute to net employment increases above and beyond subregional targets. (Still permitted in job-rich subregions would be redevelopment activities that replace aging structures with new structures if there were no **net** increase in the subregion's employment. A **gross** increase in employment would also be permitted if it were accompanied by a balancing level of new housing, and/or if the project's employment growth merely represented a

redistribution of growth **within** the subregion.)

In job-rich subregions, increase the minimum percentage of tax-increment revenues that must be spent on moderate housing within redevelopment projects. (As previously mentioned, state law requires at least **20%** of these revenues to be spent on low-income housing).

Redevelopment laws and practices have resulted in substantial improvements in many of the cities and counties in the region. However, those redevelopment efforts in job-rich areas that have resulted in further job/housing imbalance have also aggravated congestion, increased tax disparities, increased pollution, and had other negative impacts upon neighboring jurisdictions.

This measure is intended to correct the unwanted side-effects associated with unbalanced growth, while keeping the basic benefits of a renewal effort. Implementation of this action could be done by obtaining new state legislation permitting the changes identified above.

17. Tax-Revenue Sharing*:

Seek state legislation (or possibly inter-governmental agreements) restructuring the way that property and sales tax revenues are distributed to local governments so as to encourage job/housing balance. For example, in job-rich subregions, incremental increases in tax revenues from job **growth** above and beyond regional targets could be required to be contributed to a region-wide pool. Job-poor subregions would be exempt from sharing incremental increases in revenues resulting from job growth. This system would remove a significant incentive from localities in job-rich subregions for encouraging job growth, while maintaining incentives for job-poor jurisdictions to attract new jobs. A stronger, less compromising position would be to require incremental increases in tax revenues from **all** job growth in job-rich subregions to be contributed to a regional pool.

An elaborate tax-revenue sharing system has been in operation in the Minneapolis-St. Paul Region since 1975. One of the major reasons this system was created was to manage economic growth within the region. A more limited tax-base sharing program was created within New Jersey. That system was designed to preserve open space areas.

On a broader scale, this issue of reassessing the equitable distribution of property and sales tax revenues is not a new one to California's elected officials. Concern over the costs of social services and the funding of infrastructure motivated two previous landmark legislature studies. Still no consensus was forged. As

the home for the majority of the State population, Southern California may now wish and/or need, to develop it's own legislative proposal. Tax reform may well be one of the most powerful tools potential available to facilitate job/housing balance.

PRELIMINARY

APPENDIX 2

JOB/HOUSING BALANCE STRATEGIES/TECHNIQUES

Submitted for Inclusion in the

Southern California Association of Governments

Growth Management Plan, 1988

by

SEDWAY COOKE ASSOCIATES

There are four distinct strategies which could be used to ameliorate current jobs-housing imbalances, to avoid worsening of these conditions and to encourage an appropriate land use distribution. The four strategies are:

1. Planning Strategy. These strategies present the most indirect and the least intrusive impact on local government prerogatives. They rely largely on institutional and technical change.

2. Investment Strategy. This approach would foster certain kinds of development and land uses in specified sub-regional locations, the use of public investment in facilities and services.

3. Financial Strategy. This would encourage local governments to help correct imbalances by incentives and disincentives relating to local government finance.

4. Regulatory Strategy. This approach would require, by codes and legislation, that local government enact certain forms of police power control which would directly influence jobs-housing balance of the region.

These basic strategy "sets" are presented not in the anticipation that any one will be used to the exclusion of the others. Rather, they have been set forth so that they permit selection of appropriate mechanisms within an understandable context. The ultimately selected strategy doubtless will be a hybrid, with selections made from all four basic strategies. Essentially, the strategies move through the gamut of encouraging, fostering, inducing, and requiring certain kinds of change.

The proposed growth management program must ensure an assessment of the various

mechanisms as to the following: legality and need for legislative change, political acceptability, cost, and operational feasibility. Clearly, no matter what the strategy or implementation mechanisms used, they all must be handled sensitively and with an awareness of the goals to be achieved. The issues presented on pages 5-8 of the Issues Paper of December 4 clearly set forth these concerns. However, any technique may be abused or handled improperly, although obviously the more direct and stringent the method, especially regulation, the greater is the potential for misuse.

Without a full knowledge of the agency or agencies to be involved in this effort, it is difficult to make judgments on all the variables involved. For instance, efficiency is likely to increase when a technique is applied at a higher level, while political acceptability and responsiveness decline. In the following assessment, a general assessment is made as to all the criteria.

A. PLANNING STRATEGY

1. New Regional Planning Element Required in Local General Plans

Regional Balance Objective. **To provide an educational, hortatory, policy and legal basis for ensuring consideration by local governments of the regional balance implications of local actions.**

Description. A new "regional planning element" could be required of all local governments--cities and counties--which could specify the content: essentially a concern for the regional implications of local actions. The most pertinent aspect of the local elements' content would be adherence to the jobs-housing imbalance issue.

State legislation requires preparation of a general plan by all counties and cities, whether general law or charter (Government Code Sections 65300, et seq.). The plan itself has no direct legal effect. However, regulatory actions--zoning ordinances, open space zoning ordinances, subdivision control, and building permits--must be "consistent" with the general plan. "Consistency" has been interpreted to mean that land uses must be compatible with the objectives, policies, general land uses and programs specified in the plan.

Emphasis has been placed on the consistency of mapped land uses of the general plan with the zoning ordinance (using, for instance, what has been termed a land use compatibility matrix). Inadequate attention has been paid to the possible application of the consistency requirement to regional objectives of the increasing number of discretionary actions in which local jurisdictions engage.

Evaluation. Local planning elements are monitored and enforced largely through litigation. The local general plan should not be inconsistent with the regional plan. Jobs-housing objectives and policies must be explicitly addressed in the plan, which has not been done heretofore. Methodologies must be developed to insure consistency between regional plan policies and local regulatory actions. This is now the case under the new Florida legislation.

2. Local Government Adherence to the Regional Growth Management Plan

Regional Balance Objective. The most explicit presentation of the regional jobs-housing balance objective could be found in the Regional Growth Management Plan. Hence, a new requirement that local governments must adhere to this regional plan would encourage appropriate remedial actions.

Description. Local governments would be required to adhere in some measure to the regional plan: to adopt it toto, to conform to it only on regional matters, or to consider it only with respect to regional matters. While the subordination of localities to the regional agency with respect to geographically defined areas would derive from the legal nature of the regional plan and regulations, formal local adoption of the regional plan would be valuable to secure commitment to non-geographic aspects of the plan such as the goals, standards, and methods embodied in it. Local adoption would reduce the review work of the regional agency or government. Nevertheless, the process of review, even if time-consuming, could still give the regional agency the same binding oversight on actions of localities. If the regional plan and regulations provide that any plan proposal receive regional agency approval, then local approval of a proposal under regionally inconsistent ordinances would be unenforceable.

Evaluation. This may well be the most effective means of ensuring consistent local actions. However, it would still take major enforcement and administrative action. Moreover, the adverse political consequences of diluting local home rule could undermine inauguration of the system.

3. Local Government Action to be Approved by Regional Agency Determination, or Decisions or Recommendations to be Made on Regional Matters Only

Regional Balance Objective. The substantial data base of SCAG would enable it to make a case by case determination on the appropriate mix of jobs and housing for each community at any particular point in time. This would foster the most effective consideration of the issue.

Description. Local governments would be required to conform to SCAG's recommendations on local proposals for development or changes in regulations. Informal, non-binding review and recommendation could take place throughout the local planning process. Formally, the regional authority would review major local proposals to ascertain the degree of conformity with regional policy and would then make recommendations to the localities concerned. One requirement is that the types of proposals to be submitted for review would have to be clearly specified. For example, the regional agency might be given blanket authority to determine regional impact on its own. Alternatively, the review authorization might indicate housing/industrial criteria, the regional plan might delineate review sub-regions, or the regional agency might determine regional impact for each major jobs or housing proposal. Second, the degree to which and on what types of questions regional recommendations would be binding would have to be decided. For example, a regional agency might be authorized to make formal recommendations on a number of types of public projects, but with power of enforcement on only some of these issues. These approaches are similar to Florida's Development of Regional Impact (DRI) studies.

Reciprocally, the regional agency might have certain legal obligations to local units. For example, local units might have a right to demand regional agency review of certain types of actions of other local units. For certain reasons, it might be locally expedient to receive an agency opinion on matters of interlocal dispute. However, for the agency this practice might not only be inconvenient but time-consuming; it might also impair the effectiveness of the agency insofar as it is drawn unnecessarily into local-level conflicts. In the absence of statutory ground-rules for regional review at early planning stages, informal collaboration would set a better

pattern.

Evaluation. This approach would provide responsive and timely determinations, but might still present SCAG as an antagonist on what should otherwise be a joint city-region undertaking.

4. Local Government and Regional Agency Differences Resolved by a Third-Party Agency

Regional Balance Objective. The distinct perspectives of the city, counties and SCAG would likely place them in contraposition on the jobs-housing balance issue. It may be necessary to provide for some form of conflict resolution procedure.

Description. Conflict will arise from divergences between local intentions and ordinances and regional plans or regulations. Similarly, stalemate can develop following a formal but non-binding recommendation by the regional agency on a development proposal. A third approach presents a possible resolution of such conflicts for which specific written statutes can provide no clear resolution. In the case of differences of position between the regional agency and localities, provision could be made for appeal to a higher authority. This could be a state agency, a legislative appeals board, a quasi-judicial regional agency, or a court - which would pass judgments on conformance when its jurisdiction was invoked. Appeals by either the regional agency or a locality could arise because of a lack of statutory authority requiring local adoption of or conformity with the regional plan. Yet at the same time the basis for a judicial order to conform would be tenuous in the absence of definite standards for judging conformity. Finally, either through the accumulation of precedents or through specific statutory act, certain actions and areas of activity

forbidden to the regional agency might be set off. This would be analogous to a "bill-of-rights" for local public and private parties.

Evaluation. This approach provides the closest thing to joint regional-local parity, in that both positions would be taken into account in the final analysis. However, it would involve a totally new agency in this technical planning area.

5. Local Planning of More Dense or Intense Land Uses

Regional Balance Objective. To concentrate development to reduce trip lengths and air pollution generation and to reduce encroachment on valuable open space lands.

Description. This technique proposes more dense development patterns to increase job and housing proximity and to reduce necessary trip lengths. At the time of mapping of zoning districts, higher density zones could be used more liberally and larger fringe areas could be retained in open space or at a very low density. This approach would necessitate a mandate under which local governments would be required to map a given amount of land at a certain percentage above the highest residential and non-residential densities in the sub-region.

Evaluation. There could be significant political opposition. Remapping and rezoning would have to be done as part of a coherent local planning program--which may be costly.

B. INVESTMENT STRATEGY

1. Land Acquisition

Regional Balance Objective: To facilitate certain kinds of development or preserve open space to preclude development.

Description: This technique proposes the acquisition of ownership or lessor interests in real property, whether via open market transactions or eminent-domain proceedings. Once acquired, property could be developed or protected from development as desired goals dictate.

Evaluation: Open market acquisitions in more desirable areas of Southern California likely will be costly. If eminent domain is employed, "just compensation" (fair-market value) must be paid, and there may be attendant legal expenses in excess of mere "transactional" costs.

2. Housing Subsidy or Investment Programs

Regional Balance Objective: To encourage the development of affordable housing in specified sub-regions.

Description: Two general methods have evolved to enable local governments to maximize the available of low- and moderate-income housing. The first method, inclusionary zoning, involves the use of land use regulations which encourage or require developers to incorporate lower-income housing in residential developments. Density bonuses and other incentives may be used to encourage participation in inclusionary-zone residential developments. The second method, the "housing trust fund," involves extracting from office and commercial developers a fee (a fixed-dollar amount per square foot of development) which contributes to a general fund; the fund goes to construct low- and moderate-income housing. The two methods may be employed on an "either-or" basis, allowing developers to elect whether to develop lower-income housing themselves or pay an "in lieu" fee instead.

Evaluation: Inclusionary zoning typically has been applied in suburban areas, while the housing trust fund concept has found application in large, centralized cities. Both methods respond to the demand for development, whether residential or office/commercial, and work best when demand is high.

Both inclusionary zoning and housing trust funds have potential attendant costs. Inclusionary zoning may require expenditures to subsidize low-income rents. The fees collected to create housing trust funds will add to the developers' construction costs, which ultimately will be passed on to consumers in the form of higher office/commercial rents.

Inclusionary zoning has been challenged on constitutional grounds as effecting a "taking" of property without "just compensation." However, proof if a sufficient "nexus" between the desired end (low- and moderate-income housing) and the means chosen has served to defeat the constitutional challenge.

3. Downtown Revitalization Programs

Regional Balance Objective: To encourage the development of non-residential downtown uses and enhance the role of the downtown in local communities.

Description: A city often derives much of its image and identify from its downtown sector. A prominent and attractive downtown can act as a catalyst for new investors, residents, and business visitors.

Various techniques are available for downtown revitalization. The city may employ condemnation in order to assembly parcels and ensure orderly, systematic revitalization. Tax-increment financing or tax abatement may be used to provide a fund for redevelopment or as an incentive for developers to participate in revitalization programs. Federal redevelopment grants and subsidies may supply funds to finance downtown revitalization. Potential developers may be offered size and/or density bonuses in exchange for "amenity packages," i.e., open space, plazas, and the like, which will yield more attractive buildings with facilities the public can use and enjoy. Finally, the private and public sectors may form partnerships with respect to large-scale redevelopment projects.

Evaluation: Use of condemnation will involve legal expenses and uncertain procurement costs, dependent on downtown real estate values. To the extent tax abatement is employed, the city will lose tax revenues over the period of the abatement (hopefully to be recovered thereafter). Generally, the worse the state of the local economy and/or real estate market, the better the incentives, whether tax or zoning, will have to be to attract developers. Political vicissitudes may make long-term reliance on federal funding risky. Partnerships between governmental agencies and private-sector development groups may present practical difficulties.

4. Employment/Enhancement Hiring Programs

Regional Balance Objective: To encourage the availability of appropriate skills for nonresidential development.

Description: To maximize their tax bases, cities should seek to create more job opportunities for existing residents and thereby encourage a balance between the number of jobs and the number of workers residing in a city. To this end, cities can cooperate with educational, industrial, and business institutions to provide job-training programs to enable the unemployed and underemployed portions of the labor force to meet the needs of business and industry. In addition, cities can cooperate with appropriate institutions and agencies in providing job opportunities for economically, physically, mentally, or socially disadvantaged persons.

Evaluation: Greater availability of employment contributes toward maximizing the city's tax revenues from nonresidential development. This revenue is needed to support the services required by residential land uses.

5. Special Care or Service Programs

Regional Balance Objective: To increase the availability of facilities and/or services which foster increased access to jobs in commercial or industrial settings.

Description: Special care or service programs may include child care, medical care, recreational services, and vanpools and other transportation services. Essentially, they make it possible for persons to leave their homes in order to take advantage of job opportunities in commercial or industrial sectors located elsewhere. These programs may be provided by employers, governmental entities, private institutions or groups, or some combination thereof.

Evaluation: Special care or service programs contribute toward maximizing the number of available workers by allowing those who might otherwise be homebound, such as single parents with children and elderly persons, to leave their homes to work. This, in turn, may encourage the use of local workers over self-sufficient non-local workers.

C. FINANCIAL STRATEGY

1. Fair Share Bonus/Fee

Regional Balance Objective. To reward developers who achieve or exceed fair share housing or nonresidential targets and penalize those who do not.

Description. A fair share for housing or nonresidential (job producing) development would be established for each jurisdiction, depending upon whether the jurisdiction was deficient in housing or jobs. If a community is deficient in housing, all housing development would receive a bonus while all nonresidential development would pay a fair share fee. Alternatively, a bonus could be paid only for residential development above a set density level.

The size of the bonus or fee could be set based upon how far the community deviates from the fair share target; communities that were far from meeting the target would have a large bonus/fee while those with a small deviation would have a small bonus/fee. The bonus or fee should be large enough to influence the normal market decisions.

The money for the bonuses would come from the fees that were collected, unless another source of funds were made available. The bonus/fee bank would best be operated at the regional level because the money collected and paid out within a single jurisdiction may not be in balance.

Evaluation. The bonus/fee system must be coordinated closely with local zoning because collecting a fee for nonresidential development if no suitable land is residentially zoned would not be fair (or legal). The amount of the bonus and fee must be carefully calculated to ensure that the regional "bank" does not receive too much or too little money. The administrative costs involved should be taken into account in the bonus/fee setting process. The system probably would meet some resistance because it is new. A legal challenge is possible, but the system probably would be upheld if properly drafted.

2. Preferential Taxation of Undeveloped Land

Regional Balance Objective. To preclude dispersed urbanization patterns that adversely affect the jobs/housing balance.

Description. Dispersed urbanization patterns by their very nature increase the distance between housing and jobs. Non-contiguous development further exacerbates this problem. Premature development can disrupt plans that encourage a better jobs/housing balance. One technique that has been used with some success is preferential taxation. The most common approach is the Williamson Act which permits property taxes to be assessed on the income-producing value of the land rather than on the fair market value. The act requires that a contract be entered into between the landowner and the local government. The theory of using deferred assessment is that assessment based on fair market value often forces land into non-agricultural uses. The Open Space Easement Act of 1974 is a similar tool.

Evaluation. Experience has shown that preferential property taxation works effectively only when integrated closely with the local land development regulations. If the desire is to keep the land in agricultural or open space use indefinitely, preferential assessment combined with strong land use controls appears to be a reasonably fair approach. If preferential assessment is used as a development phasing device, the timing of when the land converts to fair market value must be closely coordinated with the growth plans of the community. Otherwise, the developer benefits from low holding costs at the expense of the taxpayers, with no particular benefit to the local jurisdiction.

3. Deferred Taxation of Undeveloped Land

Regional Balance Objective. To preclude dispersed urbanization patterns that adversely affect the jobs/housing balance.

Description. Deferred taxation is a method of reducing the property tax burden on open space or agricultural land so that the landowner is not forced to sell or development the property. All or a portion of the tax can be deferred. The technique operates similarly to preferential assessment described above except that that the difference between the taxes collected, if any, and the taxes based on fair

market value assessment is recaptured by the government when the land is developed.

The Williamson Act described above uses a form of deferred taxation when a contract is canceled. Other than this, state enabling legislation does not exist for deferred taxation.

Evaluation. The use of deferred taxation should be closely integrated with local land use controls to prevent misuse by landowners and developers. The system probably would require a constitutional amendment and most certainly would required enabling legislation.

4. Tax Deferral of Selected Developed Property

Regional Balance Objective. To encourage certain types of development in specific areas by reducing the property tax burden on that type of development.

Description. Moderate to high density housing or labor intensive uses could be encouraged by providing a property tax deferral for a given number of years. This approach would make the project cash flow and project financing look better than they would look without the deferral.

Evaluation. The tax deferral system, if implemented at the local level, may actually produce a contrary result. If a local government is reluctant to approve badly needed moderate density housing, its reluctance will increase if the tax revenues of such development are decreased. Some form of tax sharing or subventions could alleviate this. In addition, considerable controversy exists over the importance of the property tax in locational decisions. A tax deferral may be a financial windfall to the developer who would have located in the jurisdiction regardless of the tax deferral.

5. Interjurisdictional Tax Sharing

Regional Balance Objective. To remove property and sales tax incentives which

encourage local governments to approve inappropriate development in order to get more tax revenues.

Description. Many local government encourage land uses which will increase their property and sales tax revenues. At the same time, they may discourage residential development on the theory that it does not pay for itself. These actions can be a major contributor to the jobs/housing imbalance. Interjurisdictional tax sharing eliminates or reduces this inclination.

The tax sharing system can be regional or an ad hoc. A regional system could pool all tax revenues or just those from development above a set threshold size. The jurisdictions incurring the costs of servicing the tax-producing development obviously should be paid for their expenses. (An additional value of this system is that it reimburses a jurisdiction for costs associated with development just outside of its boundaries). An ad hoc system would deal only with jurisdictions in the vicinity of major tax generators; the tax sharing could be based on fixed criteria or could be set through a negotiation process.

Evaluation.

A tax sharing system would require state enabling legislation. The concept obviously would meet resistance from communities which are already tax rich or believe themselves soon to be in that situation. A major political effort would be required, and the system of sharing would need to be perceived as being fair. The potential benefits from such a system would be significant in that a major incentive for irrational development patterns would be removed or reduced.

6. Revenue Increment Financing

Regional Balance Objective. To encourage development in specific areas by upgrading the area and then using the increment from the increased property tax revenues and other project revenues to pay for the upgrading.

Description. Tax allocation financing is most often used in the context of redevelopment. The theory is that a redevelopment agency can attract new private

investment and thereby increase the property tax revenues from the new and existing development in the immediate area. The redevelopment agency then collects the added tax increment while the other governmental entities which have taxing authority keep the revenue attributable to the original assessed value. The redevelopment agency uses its revenue from the tax increment to pay off debt incurred in improving the area.

Evaluation. Tax allocation financing has proven quite successful in many communities in improving the quality and amount of development within designated areas. One of the major constraints to its use is the opposition from other taxing jurisdictions that object to not being able to benefit from the increased tax base. Often, some reallocation of tax revenues is made, based on negotiations among the entities.

7. Government Funding Programs

Regional Balance Objective. To encourage housing or job-creating businesses to locate at specific areas through the use of government funding programs.

Description. Desired uses can be encouraged through the selected use of government funding programs. In general, this approach is very limited because of cutbacks in funding. Community Development Block Grant (CDBG), HUD housing, Urban Mass Transit, and Small Business Administration funds may be available. State funds tend to be even more limited.

Evaluation. Government funds are great if one can get them. In most circumstances, they will not play a major role in achieving a better jobs/housing balance.

8. Tax Exempt Bond Financing

Regional Balance Objective. To encourage housing or job-creating businesses to locate at specific areas through the use of tax exempt bond financing.

Description. Industrial development bonds (IDB's), tax allocation bonds, single family mortgage revenue bonds, multifamily mortgage revenue bonds, and sales tax bonds are examples of the possibilities available through tax exempt bond financing. The advantage of tax exempt bond financing is that projects cost less to finance because the interests costs are lower than in normal bonds. Tax exempt bonds are often used in conjunction with a redevelopment project.

The Tax Reform Act of 1986 had a significant impact upon the use of tax exempt bond financing. Such bonds are now divided into governmental bonds and private activity bonds. Governmental bonds are to be used for traditional public improvement purposes while private activity bonds are to be used for the benefit of a private party. Private activity bonds have several major restrictions, including being subject to a state volume limit.

Evaluation. Tax exempt bond financing has been curtailed but not eliminated as a result of the recent tax reforms. Governmental bonds are expected to enjoy continued widespread use. If private activity bonds are not permitted, taxable bonds are sometimes an alternative.

9. Development Fees

Regional Balance Objective. To encourage a better jobs/housing balance by building facilities or providing services funded through development fees.

Description. A development fee is a fee paid by a developer which is used to provide a facility or a service which is required because of the development. Such fees have been used for some time in California for subdivisions, and their use is rapidly increasing for other types of land use approvals. Development fees have been used for water, sewerage, drainage, street, and other public facilities. A few cities have used them for day care centers and low income housing.

A potential use of development fees in addressing the jobs/housing balance would be to require fees from manufacturing plants; the fees would be used to build or subsidize affordable housing in the area which would be suitable for people of the income level who would work at the plant. A more general use of development fees

is to provide the infrastructure necessary for development.

Evaluation.

Development fees are very popular and their use is increasing. One major problem with their use is that the facilities to be funded often are needed before the funds become available. Also, if the fees are too high, they may discourage development. Recent court cases indicate that a reasonable amount of attention must be paid to the relationship between the amount of the fee and the need created by the new development.

10. Development Agreements

Regional Balance Objective. To encourage a better jobs/housing balance by allowing a more flexible allocation of financial burdens between a developer and the community through development agreements.

Description. California has passed legislation providing for agreements between a developer and the local government. The local government agrees not to change the development rules for the project and the developer agrees to provide something in return. The issues covered in a development agreement can be quite diverse. An agreement could provide that the infrastructure costs be divided in an equitable way between the developer and the local government. The agreement could provide that the developer builds a certain number of affordable housing units. (The development agreement appears to be a good tool for ensuring that affordable housing units stay affordable, at least for the duration of the agreement.) The full usefulness of development agreements have yet to be determined.

Evaluation. Development agreements are a useful tool in molding development. They present some legal issues which have not yet been tested in court, but the legal consensus appears to be that the concept will be upheld. The experience to date with development agreements indicates that local governments often underestimate what they can obtain during the negotiation process, and that effective public input is often lacking in the process.

D. REGULATORY STRATEGY

1. Greater Mixture of Land Uses Within Zones

Regional Balance Objective. Integrate land uses within zones to reduce vehicle miles traveled and allow both housing and jobs to be proximate to each other.

Description. Currently preferred zoning methodologies (those that use "exclusive" zones rather than "cumulative" zones) limit the range of land uses within each zone, thereby requiring more trips between zones to get needed services. More integrated zones--such as primarily residential areas with convenience shopping permitted--could have the effect of reducing vehicle miles traveled.

Evaluation. In most cases, complete ordinance revision would be required. Studies must re-examine the basic assumptions of zoning concerning compatible land uses. A new use classification system could be prepared by SCAG as an exemplar for local government.

2. Small Zoning Districts

Regional Balance Objective. To map smaller zones to achieve a greater mix of land uses in each sub-area, thereby reducing trip lengths and allowing for greater diversity of symbiotic land uses.

Description. Current zoning accommodates major development by designation of large tracts of land for single uses. Smaller tracts with varied uses (or at least small non-residential zones interspersed within residential zones) could bring trip ends closer together, thereby reducing trip lengths. Special zones are like traditional

zoning districts except that uses are permitted in them in accordance with environmental characteristics of the land and not only their compatibility with adjacent land uses. The special zone has special restrictions that apply to all land uses within the zone and is generally employed where information on the nature and boundaries of the environmental condition of concern is largely complete. This results in a much larger intermixture of uses.

Evaluation. Since the zoning ordinance must be consistent with the General Plan, more detailed planning is required to implement this technique. Otherwise, "spot zoning" accusations will ensue. Plan policies must at least specify the need to integrate land uses to make up for the inevitable gross quality of the General Plan map.

3. Growth Sequence Zoning

Regional Balance Objective. To control the timing and location of growth to deflect residential growth from job-poor areas.

Description. Growth sequence zoning, sometimes called "tiered zoning", divides an urban area into districts of immediate urbanization, near-term urbanization, reserve, long-term reserve, etc. It can be used in conjunction with other regulatory techniques to apply different development constraints in different areas. The availability and cost of public services have been the primary criteria used in decisions about making reserve areas available for development. However, as with other growth controls, this technique could be most useful in promotion of compact mixed urban development patterns. It could have secondary value as a means of diverting growth from job-poor areas. With appropriate enabling legislation, the technique could be applied at the regional and sub-regional scale to allocate growth. The agency would

have to be given the power to plan land use distributions throughout the region.

Evaluation. Implementation problems are sizable, including the necessity for significant amounts of data upon which to base the growth zoning and the comprehensibility of a totally new set of growth management zones. However, where the criteria for mapping are sound and explicit, and where the locational information on the growth determinants (e.g., housing and job needs, hazards, socio-economic composition and natural resources) is abundant, this approach to growth control may have good long-term potential. Some legal issues have arisen, and may continue to arise.

4. Conservation Zoning

Regional Balance Objective. Limiting development in areas of fragile natural values and unique characteristics may be secondarily useful in achieving better jobs-housing balance.

Description. Conservation zoning, also called "open space zoning", encompasses a variety of special zoning techniques suited to different environmental conditions. The aquifer recharge area is used where surface water is a significant contributor to groundwater. It usually restricts density and impervious groundcover, requires transport of effluents away from an area or controls private sewer systems including septic tanks. Another example of the technique is the aquatic preserve or wetland conservancy district in which certain uses are restricted; selling, filling, and dredging is limited; density transfers are permitted; buffers between land uses and sensitive edges are required; and runoff and erosion/sedimentation controls are required. All these can be considered in identifying job-poor areas subject to early and/or premature development.

Evaluation. Data needs are the most substantial of any technique. Insufficiently researched and poorly designed regulations may be subject to serious legal challenge.

5. Special or Conditional Use Permits

Regional Balance Objective. The "special permit" or "conditional use permit" allows a use different from that specified in the ordinance as permitted by right, when conditions and criteria prescribed in the ordinance can be satisfied (Government Code Section 65901). Its purpose is to control the number of such uses, insure that the use is compatible with the proposed site and insure that uses with many externalities are properly located. The suitability of the area for the proposed use, rather than hardships due to the uniqueness of the property, must be demonstrated. For example, even though a district is zoned for low density residential use, such projects as a rest home or a boarding house may be permitted by special permit upon appropriate showing. For current purposes, certain uses which are involved could be made conditional, e.g., new housing in job-poor regions or new employment generators in housing-poor regions.

Description. The special permit procedure is employed in preference to special zones or overlay zones where information is incomplete. Special permits will be required in a zone when there is a determination that there is a likelihood that a specific constraint may exist. Procedures on the handling of special permit applications vary in different counties and cities. Evaluation may be performed by the planning commission or department, a board of zoning adjustment or zoning appeals, or a zoning administrator, with appeal to the city council or board of supervisors. Permits granted by the zoning administrator may be called "administrative use

permits" and may exist in addition to special use permits. The scope of review is more limited, involving less discretion and greater adherence to adopted plans and standards. They might be used for smaller projects which would have less potential impact.

Evaluation. A conditional use permit procedure, if used extensively in a local community, requires a well-trained staff. Review of development proposals is time-consuming and many staff members are not comfortable dealing with the more subjective criteria often found in conditional use permit ordinances. Courts have permitted very general criteria for the issuance of a use permit. However, there is a requirement that findings be made in a conditional use permit action. SCAG may wish to present model criteria and findings.

6. Development Timing Permits

Regional Balance Objective. To control the timing and location of urban development with direct impact on the pattern of jobs and housing.

Description. Under the system of development timing permits, also known as "special development permits," land zoned for residential use is not allowed to be subdivided until the landowner obtains a special permit from a city council or board of supervisors. This permit is granted only if the landowner can show the availability of adequate public services such as sewers, drainage, park sites, and roads. Adequacy of service is measured by accumulating points on a scale designated in the ordinance. For example, proximity to jobs could earn the developer points. A landowner instead of accumulating points could provide the needed jobs himself.

Evaluation. . As with other growth management techniques, development timing permits raise constitutional issues of right to travel, due process of law, etc.

7. Growth Management Quota System

Regional Balance Objective. (1) To restrict residential growth to reduce increases in vehicular travel and pollutant generation; and (2) to ensure compact development and impacts consistent with regional policies.

Description. The implementing agency limits the number of new residents or dwelling units which its jurisdiction may accommodate within a year. A special permit is required to develop. As applied in some jurisdictions, rival plans are evaluated by a reviewing board which rates proposals in terms of public services, quality of design, environmental quality and other factors. The ratings determine precedence up to the point where the annual quota is filled. The review also could allow the agency to examine anticipated job availability.

Evaluation. The system has been upheld although it is still subject to accusations of favoritism. Implementation constraints are similar to those of all special permit procedures.

8. Impact Zoning

Regional Balance Objective. To evaluate development proposals against prescribed impact criteria, which may include job and housing availability.

Description. Impact zoning involves the application of a "performance" or "operational assessment" approach to anticipated effects and the allowance of corresponding development. The EIR process provides substantial information on impacts which can be evaluated against criteria on availability of housing and jobs. The environmental assessment process has the potential to be merged into a more refined method for comprehensively estimating economic and other impacts in quantifiable ways through, in part, the use of cost-benefit analysis. Impact zoning can be viewed as the obverse of performance standards. Rather than a limitation being placed on external impacts after development is to be there, these impacts dictate the level of allowable development before its approval. The process can be allied with site plan review in the subdivision process.

Evaluation. Constitutional problems may arise if the impact criteria are imprecise or excessively subjective. Denial of development permission may be challenged if the relation to the public health, safety and welfare is unclear. Proposal review is time consuming and complex and may be beyond the capabilities of many local agencies.

9. **Density Regulations: Cluster Zoning, Transferable Development Rights or Credits, and Incentive Zoning**

Regional Balance Objective. To achieve more dense development patterns to reduce trip lengths and increase job availability.

Description. As with many of the other techniques, density regulations can be used to affect trip patterns and jobs proximity. The technique is also applicable to the dispersion or reduction of development in pursuit of balance. There are at least five

kinds of housing density regulations: (1) cluster (or "density") zoning; (2) transfer of development rights or credits (TDR or TDC); (3) incentive zoning; (4) slope-density provisions; and (5) planned unit development (discussed below). All allow a certain flexibility in the handling of fixed density requirements and involve careful review of development plans.

Under cluster zoning, development permitted on one part of a site can be transferred to another part of the site. (Under TDR or TDC, development is transferred to another site.) Cluster zoning allows placement of structures anywhere on a site without relation to minimum lot sizes. Site constraints can be more easily accommodated and greater development potential ensues.

Transfer of development rights or credits is a relatively new concept that has been applied under only very controlled circumstances. It involves the differentiation of certain development rights from other property rights, usually by public action, for exchange in the open market or through a public agency. The technique combines exercise of the police power, eminent domain and development functions and can involve taxation policies. It avoids uncompensated reductions in land value which can accompany most exercises of the police power, thereby allowing great control over use and intensity location.

Incentive zoning allows density bonuses for provision of certain facilities, amenities, or design improvements. These could also include job provision.

Evaluation. Cluster zoning requires sophisticated planning and zoning, but does not require substantial personnel or expertise. Transfer of development rights, on the other hand, is complex in its conception and requires careful program design and

administration to avoid numerous planning and legal difficulties that could frustrate its purposes. Incentive zoning is relatively simple to institute, but also has raised some legal issues.

10. Intensity Regulations

Regional Balance Objective. To regulate the ratio of open space to development (and indirectly to regulate density).

Description. The most straightforward application of intensity regulations is in the form of lot size specifications: small lots to concentrate development for urban compaction; building spacing and height-distance relationships, to improve liveability; and floor-area ratios (including impervious surface ratios and landscaped space ratios), to increase building intensity of non-residential uses, and to increase the ability of services to handle development and for visual objectives.

Lot size specifications have usually required minimum lot sizes per dwelling unit or structure in order to reduce density and increase open space. Much less rarely used are maximum lot sizes to encourage higher-density development and clustering of structures. (Intensity regulations apply only to the required lot area per building site and do not preclude retention of portions of a tract in open space. The floor-area ratio (the maximum floor area permitted per square foot of lot area) more directly relates structural coverage to uncovered lot area, though it provides only minimal incentive to build at greater densities.

The open space ratio is a more direct means to the same objectives: each building, dwelling unit, room, or square foot of floor area is required to have a corresponding

proportion of unsurfaced groundspace on the same lot. In some applications, the open space can be provided elsewhere on the development site. All or part of the open area may be required to be landscaped, in which case there is a landscaped area ratio; impervious surfaces may be limited with a maximum ratio applied.

Evaluation. Lot size zoning is crude and easily applied, but may ignore important differences among sites. Open space and other ratios are the most direct and powerful intensity regulation; with careful study--which is more costly in terms of ordinance preparation but probably not implementation--standards can be varied from zone to zone, thereby permitting greater attention to localized conditions.

11. Off-Street Parking and Loading Regulations

Regional Balance Objective. To discourage automobile trips in order to reduce congestion and increase transit use.

Description. The off-street parking regulations of most zoning ordinances require minimum numbers of parking spaces for specified land uses. Recent work in parking management has indicated the utility of parking space maximums as a means of discouraging vehicle trips and enhancing the jobs-housing balance. There has been a concomitant realization that vehicle disincentives must be accompanied by transit improvements. One proposal is for limitations on parking spaces only where transit service is available: as the transit system expands, other parking spaces could be eliminated either by revocation of special permits or through amortization of nonconforming uses.

Evaluation. Off-street parking requirements and related improvement standards are an accepted part of zoning provisions. Once standards and regulations are established, little administrative attention is required except as a normal part of the development review process. The concept of parking maximums or prohibitions is a new one, requiring full explanation.

12. Temporary Moratoria on Development

Regional Balance Objective. To slow or temporarily halt growth while comprehensive planning is performed.

Description. Temporary moratoria on development have been used to help localities withstand the secondary environmental effects of uncontrolled growth. Interim zoning, discussed below, is the most familiar moratorium technique, but cities and counties also may have the power to suspend the granting of building permits for residential construction until certain criteria for the provision of services are met.

Interim zoning is temporary zoning enacted during the preparation of a general plan or an element thereof for the purpose of preventing development which might defeat the ultimate execution of the plan. Very restrictive regulations are permitted because the regulations are not permanent and because the courts recognize that adequate time is required for the preparation of local plans. Virtually all uses can be prohibited. Interim zoning is authorized by Government Code Section 65858. The statute prescribes the procedures which must be followed and the maximum length of time the interim zoning can be in effect. Charter cities are not bound by these provisions and could adopt interim zoning unless prohibited by their charters. The courts would then probably use a standard of reasonableness in ruling on the maximum time an interim zone may be in effect.

The courts have raised some issues regarding interim zoning. The city or county should be able to show that it does in fact have a planning program in process or is about to engage in one. As with other types of zoning, interim zoning may not be used to lower the value of the property in anticipation of public purchase. Also, it is essential to adopt the zone before, not after, inauguration of the planning program and applications for building permits are made.

Moratoria and interim zoning in particular are easy and inexpensive to implement. No background studies or plans need be done.

13. Contract Zoning and Development Agreements

Regional Balance Objective. To enable the implementing agency to place restrictions on the development of a site in accordance with the jobs-housing balance.

Description. Contract zoning is a rezoning in which the applicant agrees to special restrictions on the rezoned property which do not apply to other property located in the same zoning classification. Contract zoning is sometimes called conditional zoning. There have been attempts to distinguish the two but is probably safest to consider them to be the same. An example of contract zoning would be where the local government agrees to rezone from agricultural to industrial if the landowner guarantees the provision of a certain number of jobs.

Evaluation. Contract zoning involving dedications has been upheld in California. However, the courts have said that contract zoning which limits uses beyond those permitted elsewhere in the zone would be invalid.

Contract zoning requires no special planning studies or special skills. The city attorney or county counsel should be consulted before it is used.

14. Floating Zones

Regional Balance Objective. To selectively permit special uses or use groups within a jurisdiction in accordance with defined criteria for location and impacts.

Description. A floating zone is similar to a conventional zone except that it is not fixed to any location in the community. The most common example is a Planned Unit Development (PUD) Zone. The provisions of the floating zone are contained in the zoning ordinance and the zone itself is usually mapped upon application by the landowner. However, provisions could be written so that the government could initiate the action to locate the zone.

One purpose of floating zones is to permit specific regulations to be applied to certain sites or areas when it would not be practical to apply the regulations in advance to large areas. Floating zones also may be used to avoid residential overzoning--land is zoned for a low- or moderate-density use and is rezoned to a higher-density use only upon application.

Evaluation. No specific enabling legislation exists for floating zones. In order to minimize legal problems, a floating zone should have some standards which must be met before the zone could be located. The only background studies or plans necessary are those to establish the standards for location. Most of the required studies can then be shifted to the landowner. The local government must have the capability to evaluate an application for location of the floating zone.

15. Planned Unit Development Procedure

Regional Balance Objective. To improve site design in accordance with plans for a jobs-housing balance by allowing density bonuses and other development incentives.

Description. A planned unit development (PUD) is a unified development which is excluded from the general setback, yard, and height regulations of the zoning code and thus produces clustering of development. A PUD normally is used for residential uses but also may be used for commercial, industrial, or a combination of uses. A PUD usually results in a common open space area and frequently has commercial and public facilities to serve residents.

Because it involves wide discretionary authority, approval of PUD applications can be conditioned on development that is sensitive to localized economic needs. The integration of land uses also reduces the need to make trips by placing needed jobs and services within walking, biking, or at worst short driving. Negotiations between developer and government are usually handled by the planning department or a zoning administrator, with approval by the planning commission. The application procedure can usually be carried on concurrently with subdivision map approval. Required submittals typically include a preliminary development plan, site analysis, tentative development plan, and final development plan.

No specific enabling legislation exists for PUD but its use has been upheld by California courts.

Evaluation. Any legal issues in California concerning PUDs are likely to be with the procedures for establishing the PUD rather than on the validity of the concept. A PUD may be established either by rezoning or by means of a conditional use permit. A rezoning should be enacted by an ordinance passed by the local legislative body. A conditional use permit procedure must permit limited administrative discretion.

A PUD ordinance places most of the burden of planning and design studies upon the landowner. The ordinance is easy to implement if the planning department has the personnel to review applications.

16. Non-Conforming Uses/Amortization

Regional Balance Objective. To provide the means to abate land uses that are incompatible with jobs-housing balance plans and zoning objectives.

Description. A non-conforming use is a use which was a lawful use existing on the effective date of the zoning restriction but which is not in conformity with the current zoning regulations. Non-conforming uses include non-conforming buildings and non-conforming uses of buildings and land. Non-conforming use regulations can be very important in the implementation of an effective planning and zoning program, and may have some indirect benefit in encouraging jobs-housing balance by curtailing excessive non-residential or industrial activity in jobs-rich and housing-poor areas.

The objective of these regulations is to eliminate or at least prevent expansion of buildings or uses which do not conform to current policy or zoning regulations. No specific enabling legislation exists authorizing elimination of non-conforming uses. The "taking clause" of the state and federal constitutions sets limits on elimination.

Many zoning ordinances have provisions concerning the expansion of non-conforming uses, their change to another use, the amount of repair or alteration permitted, and prohibitions on reuse after abandonment or destruction. A non-conforming use of land may be terminated immediately. A non-conforming building, or non-conforming use of a building, on the other hand, usually cannot be terminated until it has been found to be a nuisance. The law requires that some amortization period be provided. The period can be equal to ordinary economic life but there is still some debate over whether the time period can be shorter than that.

Evaluation. Implementation of a non-conforming use program requires no special studies or staff but it does require sufficient personnel to discover non-conforming uses and to monitor them. For these reasons, and because of the unpopularity of large-scale enforcement, the termination provisions of non-conforming use regulations often are not implemented.

17. Specific Plans

Regional Balance Objective. To promulgate a comprehensive set of regulations for the development of an area in accordance with comprehensive plans.

Description. The specific plan, authorized by Government Code Sections 65450, et seq., permits the local planning agency to prepare "specific plans" for the "systematic execution of the general plan" for adoption by the legislative body. The form of presentation of the specific plan typically is by a map and accompanying text statements. Despite its name and its authorization by state law, the specific "plan" is regulatory in effect. The specific plan must, deal with a broad range of aspects of

control, including use, population density, intensity and building form, and public facilities.

Specific plans have significant potential for jobs-housing applications, especially where development is proposed in locations where uses are proposed for change. Here the plan could be used to provide significant variation in regulation of areas which are needed for intense urbanization.

Evaluation. There are many significant legal and constitutional issues related to the specific plan. One of the most important is the significant potential for detailed variation allowable within small areas. For instance, in some areas it may be possible to entirely prohibit residential development while giving enormous latitude for employment-generating development. Occasionally, to avoid the problem of economic disparity, some development permission is allocated in a roughly equitable manner to assure that all owners can achieve some return on their lands. Of course, the courts have generally allowed uneven treatment if the regulatory proposal is predicated on sound planning policy.

Another issue is the extent to which the specific plan can supersede or supplement underlying zoning. An argument can be made that the requirements for "consistency" of zoning with the general plan indicate that a specific plan would not replace zoning, but would merely supplement it. Other positions exist on this issue.

SCAG
JOBS-HOUSING BALANCE STRATEGIES
EVALUATIONS AND RESPONSIBILITIES MATRIX

	Evaluation						Optimal Allocation to Alternative Agencies					
	Difficulty of Establishment	Legal Authority	Public Acceptance/ Understanding	Jobs-Housing Balance Efficacy	Administrative Costs/Problems	Requirements for Coordination	Regional Planning and Development Agency	Umbrella Regional System	New Jobs-Housing Balance Agency	SCAG/AQMD Joint Agency	SCAG Coordinating System	Local Agencies
Planning												
Regional Planning Element	X	X			✓							P
Adherence to Regional Plan	X	X	X	✓		X					P	P
Regional Agency Oversight	X	X	X	✓	X	X		P	P	P		S
Regional-Local Conflict Procedure	X	X		✓	X							
Plan Intensity		✓	✓						P			P
Investment												
Land Acquisition		X	X				P		P			S
Housing Subsidies		X	X	✓	X		P		P			S
Downtown Revitalization	✓	✓	✓			X	P		P			P
Employment Programs	X		X	✓		X	P		P			S
Human Services	X	X	X		X		P					P
Financial												
Fair-Share Bonus/Charge	X	X	X	✓	X	X	P	P	P			
Preferential Taxation	X	X		✓	X	X	P					
Deferred Taxation	X	X			X	X	P					
Tax Sharing	X	X	X	✓	X	X	P	P	P			P
Tax Allocation Financing	✓	✓	✓									P
Industrial Development Financing		✓	✓	✓		X	P		P			P
Regulation												
Mixture of Land Uses	✓	✓	X	✓			S	S	S	P	S	P
Small Zoning Districts		X		✓			S	S	S	P	S	P
Growth Sequence Zoning	X	X			X	X	S	S	S	P	S	P
Conservation Zoning		✓					S	S	S	P	S	P
Special Permits	✓	X	X	✓	X		P	P	P	P	S	P
Development Timing Permits	✓	X	X	✓	X		P	P	P	P	S	P
Growth Management Quota	X	X	✓	✓	✓	X	P	P	P	P	S	P
Impact Zoning	X		X	✓	X		S	S	S	P	S	P
Density Regulations	X	X	X	✓	X	X	S	S	S	P	S	P
Intensity Regulations				✓			S	S	S	P	S	P
Parking Regulations	✓		✓				S	S	S	P		P
Temporary Moratoria	✓	X	✓				S	S	S	P	S	P
Contract Zoning		✓			X		S	S	S	P	S	P
Floating Zones	✓						S	S	S	P	S	P
PUD Procedure	✓		✓	✓	X		S	S	S	P	S	P
Nonconforming Use Amortization		X	X		X						S	P
Specific Plans		✓	X	✓							S	P

Legend

✓ • ease/advantages

X • difficulty/problems

P • primary responsibility

S • secondary responsibility

▭ • N/A or neutral

PRELIMINARY

APPENDIX 3

URBAN FORM ANALYSIS

Submitted for Inclusion in the

Southern California Association of Governments

Growth Management Plan, 1988

by

THE PLANNING INSTITUTE
SCHOOL OF URBAN AND REGIONAL PLANNING
UNIVERSITY OF SOUTHERN CALIFORNIA

URBAN FORM ANALYSIS

Our earlier analysis suggests that in a dynamic region there is no such thing as an optimum-sized sub-center, nor is it possible to identify optimal sub-center densities. The conceptual model made the point that sub-centers rise and fall as part of an overall regional spatial restructuring whereby the area remains competitive on world markets. Sub-centers grow to a size where the benefits of agglomeration are not yet offset by growing congestion costs. This principle, however, does not indicate an optimal node size since the underlying agglomeration and congestion functions change so rapidly.

We have identified nineteen activity centers in the five-county area. Yet, these centers only account for 17.5% of the total jobs. 82.5% are scattered around the region in spatial groupings that cannot really be called 'centers' in the traditional sense. Rather than an 'urban village', these tend to be dispersed activity nodes that are expected to become more prominent in the region's future. They are too spread for much face-to-face contact. They are not likely to be traversable by pedestrians. They are dependent on auto access and parking, an attribute which should be recognized as they grow. Conventional and para-transit modes will have a moderate role in these centers and major buildings (of which there will be few) should be designed with vehicle bays and shaded waiting areas fitted into the structures' major entrances and access points.

The built environment that is developing in the SCAG region is, perhaps, too varied to discuss in a short essay. There are a few principles, however, that should be considered. First, the old concept of

the 'livable city' is probably simply a rhetorical device whose usefulness in the local context must be re-examined. Not only have 'livable city' designs been few-and-far-between, but a case can be made that they belong more to the receding dream of the 1890's downtown than to the modern regional cityscape -- even one with that contains a number of 'urban villages'.

The far-flung and dispersed settlement pattern that will continue to characterize Southern California will be dominated by auto-oriented 'commercial strips', 'mini-malls', 'fast-food rows', etc. These fixtures have drawn widespread criticism from planners and architects while they continue to prove their economic durability. Surely, auto-oriented developments cannot be removed altogether and the City Los Angeles' recently enacted ban on 'mini-malls' does not hint that a well developed policy response is at hand.

How, then, can Southern California present a coherent urban form and a set of policies that would promote that form? How is 'livability' assured in a pattern of regional urbanization in which distinctions between the core and the periphery are not so dramatic; in which centers, although in greater numbers, play a proportionately less important part in the urban game; in which density gradients are more frequent and flatter than we are used to; and in which accelerating growth at the periphery perpetually alters the natural landscape in which we frame our view of development?

Conventional tools and expectations may not be too helpful here. We can take comfort from information that suggests that while designers and conservationists lament urban sprawl, it continues to pass market

tests with its users. Moreover, designers who see urban 'sprawl and spread' as a process yielding undifferentiated urban form should feel sobered by residents in the new outlying areas who rarely report being lost when searching for their neighborhoods.

As argued elsewhere in this essay, the promotions of jobs/housing balance may create more rather than less differentiated urban form at the regional scale. In other words if we are redefining 'livability' in terms of such balance (and its cascading effects on environmental quality, real wages, and stress) then our criteria for urban form must adjust accordingly. Much research on the perception of urban form suggests that perception is a function of many non-physical as well as physical attributes (Lynch, Appleyard, Banerjee, Proshansky, et al). The appreciation of urban form and the meaning that form conveys to the viewer are inseperable. Small-scale design, i.e. neighborhood and block become the repository for signs and symbols that, both, orient and elevate human perception.

It follows, therefore, that urban form strategies for the region should encourage the following:

1. Greater emphasis placed on the differentiating power of local designs (architecture, street furniture, and subdivision configurations).

2. The orientation of major travel routes to significant landscape features need to be emphasized in their design (e.g. the Foothill freeway).

3. 'Centers' architecture, no matter how modest the centers may be, should reflect, perhaps even exaggerate, their presence rather than the otherwise dispersed pattern of the region (to serve Wren's steeples).

4. Urban form policies dealing with areas larger than their neighborhood must be flexible enough to tolerate a wide

range of interpretations. Each succeeding ring of metropolitan growth should be allowed its own character.

5. Cultural diversity and the ethnic clustering must also be given expression in urban form (the 'new rancheros' of Santa Margarita, Moreno Valley, Rancho California; the Chinese Beverly Hills in Monterey Park; the Koreatown of Los Angeles and the many Latino neighborhoods and cities).

6. All the commercial districts such as the mid-Wilshire, Santa Ana, Riverside, suggest that the development of a medium-to-higher density residential vernacular should be placed on the design agenda.

California has done remarkably well in refining the design of the single-family home and is not likely to have much need for refining the design of the residential tower. It is the in-between densities in which so much of Southern California resides (ten to forty dwelling units/acres) that have received the least creative attention. In any case, local zoning codes do not help; they merely promote bad repetition. The creation of the prototype designs of these densities and their promotion in local design and development codes would help improve these older centers enormously.

PRELIMINARY

APPENDIX 4

SOCIO-ECONOMIC POLARIZATION OF THE SCAG REGION

Submitted for Inclusion in the

Southern California Association of Governments

Growth Management Plan, 1988

by

THE PLANNING INSTITUTE
SCHOOL OF URBAN AND REGIONAL PLANNING
UNIVERSITY OF SOUTHERN CALIFORNIA

SOCIO-ECONOMIC IMPACT ANALYSIS

Many analysts have recognized that the U.S. economy's labor market is the world's most potent anti-poverty device. Indeed, unabated legal and illegal entrance to this market bears strong testimony to this view. The peculiar strengths of Southern California's economy, as outlined in earlier chapters of this report, sharpen the social importance of the local labor market.

At the same time, it is clear that strong upward mobility is not available to everyone. Nor is upward mobility an unmixed blessing. Social stresses are a consequence of both phenomena. It is now apparent that many black Americans have been moving upward -- while many other blacks have drifted in the downward direction. The lowering of some traditional barriers have enabled the black middle class to flourish as never before. At the same time, the exodus of the middle class from traditional black neighborhoods, a notable achievement of recent legal and social developments, has left a lower-middle and 'under' class in worse straits than ever. In fact, the black population is now so economically 'bi-polar' that the traditional use of statistical measures of central tendency (average wealth, median income, etc.) is thought to be completely meaningless. For other groups (the immigrants, the homeless, other ethnic and disadvantaged) the patterns are less clear. Many of them do, however, find some measure of relief in regional 'shadow' markets for housing. The expectation that these sources of housing supply may come under increased pressure under the growth control scenario (see discussion, below) bodes poorly for these groups.

The documented plight of blacks, however, turns out to be one of the most powerful examples of the social consequences of spatial settlement changes, since some of the socio-economic difficulties have been traced to the spatial separation of the various black income groups. It remains to be seem whether aspects of this problem can be treated by elaborations of SCAG's 'fair share' approaches.

Bi-polarity, while less pronounced, can be detected for other local ethnic groups. In each case, the reasons for the trend are complex and not always well understood. Further research is surely called for.

Rapid upward social mobility also has effects that may be costly in the long run. The costs that are associated with the break-up of the 'extended family' have been well documented. We see no trends in the near future that would help to reverse any of the ominous side-effects that appear to accompany our prosperity and economic success. The traditional response of Americans to social difficulties has been to move away from them -- less so than to organize local solutions or local concern.

The moving-away option will continue to be available to all but the poorest of Southern California and will limit the development of proud and distinct neighborhoods that seek to resolve their difficulties. It is unclear that SCAG's growth plans can limit or reverse these particular tendencies.

The socio-economic impacts of growth control would probably exacerbate tensions and problems that already exist. As noted in our discussion

of population impacts (growth contingency analysis), the affluent and the young would be those most likely to leave (or avoid) the region, in search of new housing and employment, if the strictures of growth control become severe enough. The median age of residents would rise. The population would be older, less affluent, less mobile, more service dependent, and certainly less entrepreneurial.

Minorities would be disproportionately affected. Minority households are typically large in size, and doubling-up is already visible in many of the region's minority enclaves. These factors suggest some coping mechanisms that will have to come into play if housing and jobs become harder to find. Lacking the income for home ownership, many minority households will concentrate in the communities having a larger rental housing stock. These minority concentrations are, of course, in the urban subregions. These subregions would be challenged to provide more services, especially schools. Ethnic tensions will probably be strained if competition for limited opportunities increases.

Our housing impact discussion identified several socioeconomic reactions to housing shortages and overcrowding, including family tensions and the potential for increased criminal activity. Lack of jobs could lead to more informal economic activity such as bartering and street vending. Crime as a career choice would also be considered by more young people.

Elderly, disabled, minority and single-parent households would receive less social service support, as suggested in our discussion of fiscal impacts. Development exactions that have filled much of the funding

gap left by Propositions 13 and 4 would be cut off, further limiting local governments' abilities to serve the needs of the changing populations.

Most of the socioeconomic benefits of growth control would be enjoyed by middle income homeowners who are not impacted by the projected employment cutbacks. These enclaves as well as the service facilities available to these groups would be less congested since access to them will be restricted compared to the normal economic development scenarios.

PRELIMINARY

APPENDIX 5

REGIONAL OPEN SPACE POLICIES

Submitted for Inclusion in the

Southern California Association of Governments

Growth Management Plan, 1988

by

SEDWAY COOKE ASSOCIATES

A. INTRODUCTION

Protection of natural resources is essential for the Southern California populace as well as for the region's overall environment. At the same time that natural processes are allowed to function, our air, water, and land are being protected. Natural resources and processes have more than aesthetic and recreational value; they are critical to human survival. Hence, the protection of these processes and resources, and the open space in which they are found, clearly is in the public interest.

A major problem facing the Los Angeles Metropolitan Region today is the random scattering of development. Open space shapes and structures this development into logical use of land. Development should take place only in those areas not intrinsically suited for open space.

The SCAG open space plan should preserve and manage the use of natural resources. Open space safeguards stem from both the normal effects of nature and the hazards of short-sighted human alteration of the environment. Elements for conservation are defined and identified by physiographic, geologic, vegetative, and hydrologic characteristics. Land to be preserved does not depend only upon demand for recreational land or scenic quality. Rather, preservation of open space depends on unsuitability for urban development and importance as a natural resource. Open spaces, which are of the greatest benefit if kept free of development, are essential to the proper functioning of natural systems. These natural resources are:

- oceans and watercourses;
- wetlands;
- groundwater recharge areas;
- floodplains;
- erodible soils;
- forests;
- soils with limitations for development;
- agricultural lands; and
- areas of unique/endangered plants and animals.

Regional development must be compatible with, and be based upon, protection of natural resources. When vulnerable areas are identified, they should become a key

basis for regional policies which guide the location of private investment, serve as a means for coordinating public services and facilities, direct regulation, and ensure efficiency in urban investments.

Thus, a total regional open space system for Southern California must be based on its natural processes and resources and accommodate the basic functions of open space: protection of natural resources, provision of recreation, and structuring of urban development. In the final analysis, such a system must meet the needs and demands of the Southern California population.

OPEN SPACE CONSERVATION POLICIES

Environmental quality is determined by natural resources and human use and misuse of those resources. Regional planning should emphasize that the wisest possible use be made of these resources: which are to be consumed and which preserved for today's and future populations. By deciding which should be protected, the pattern for urbanization is determined.

Urbanization in Southern California has not reflected an adequate concern for establishing a balance between man and the natural environment. All lands in the Los Angeles Metropolitan Region's are not suitable for urban development. The protection of lands should not depend only upon the land uses they can accommodate. The designation of open space areas should be based on what is needed to protect such vital natural resources as wetlands, groundwater recharge areas, floodplains, woodlands, production lands, and lands containing unique or endangered plants and animals; and based as well on what is needed to avoid such hazardous environmental conditions as erosion, poor soils, and seismicity.

Protection of these lands safeguards humans from the normal long-term effects of natural processes and from the effects of short-sighted human alterations of natural resources. Protecting these resources can thereby promote the health, safety, and general welfare by allowing natural ecological systems to function normally to benefit society.

Land use designations should recognize these systems and respond to them. Protection does not mean total prohibition of these lands from other uses; rather it means the wise and managed stewardship of the lands, preserving the normal functioning of the natural systems, yet allowing compatible development. In some instances, open space areas should be kept free of development. In some instances, such areas can sustain certain types of development without a detrimental impact. And some open space may not be inherently vulnerable, but should remain open due to its regional location.

The retention, design, and use of protection open space can serve many functions and satisfy many needs. Generally, urban development should not occur in wetlands, floodplains, on certain shorelines and erodible slopes or in natural areas needed for educational or recreational purposes. Yet, development is now occurring in many of these areas. With some notable exceptions, open space has not generally been treated as an important aspect in the planning and development of the region.

A special relationship should be established between the natural environment and the use of land. It is important that natural resources provide initial direction to and be a basis for SCAG's regional planning and for local land use planning. Location, design, and construction of land use and infrastructure must be compatible with and be based upon the management of open space. Before development occurs, the impact on open space should be assessed and necessary and appropriate changes made in plans and programs.

Policies

Open Space Function. The open space system should be a primary basis for the development of regional and local comprehensive land use plans. Regulations should be established for protection of open space, and the general location of protection open space areas should be identified at the regional level.

Consistency with Jobs/Housing Balance Objective. Open space policies should generally comport with and foster a balance between employment and available housing in any given subregion. To this end, different open space policies may be selected depending on a subregion's status as "jobs-rich," "housing-rich," or "balanced."

Jobs-Rich Subregions. Subregions in which the ratio of jobs to housing units substantially exceeds 1.20 to 1 may be considered "jobs-rich." In these areas, open space allocations should be increased over current levels, in order to create an environment more attractive for living, as compared to working, than is presently the case. Concurrently, incentives not inconsistent with increased open space allocation should be provided for residential development.

Housing-Rich Subregions. Subregions in which the ratio of jobs to housing units falls substantially short of 1.20 to 1 may be considered "housing-rich." In housing-rich subregions, current open space requirements should be relaxed in order to entice employers to relocate to such areas (by allowing them to maximize their per-square-foot revenues and minimize per-square-foot costs). Relaxation of open space requirements may also result in the conversion of existing housing units into commercial (job-yielding) units, thus decreasing the number of housing units vis-a-vis commercial units.

Balanced Subregions. Subregions in which the ratio of jobs to housing units is not substantially above or below 1.20 to 1 may be considered "balanced." In these areas, current open space allocations should be considered optimal and left unchanged, unless desired changes can be made without inducing imbalance. As formerly imbalanced areas come into balance, their open space allocations may be adjusted upward or downward, as appropriate, until they comport with allocations in already-balanced areas. Newly developing areas should allocate open space in accordance with allocations in currently balanced areas.

Allocation Standards

Currently, no set criteria exist for formulating open space allocation standards, other than for recreational use open space (parks). However, in light of the regional objective of jobs/housing balance, a "mean allocation standard" should be set. This standard should reflect the average total open space (including all non-park open space) allocation, expressed in terms of acres per 1,000 persons, of presently balanced areas. In no instance should the standard fall short of SCAG's current recommendation of 15 regional park acres per 1,000 persons. Consistent with the open space policies set forth in (A) above, "jobs-rich" areas should allocate open space in excess of the mean, while "housing-rich" areas should allocate less than the mean.

"Balanced" areas, by definition, should already have allocated at or near the mean. As imbalanced areas come into balance, allocation should be adjusted toward the mean.

Implementation Tools

In jobs-rich areas, implementation of appropriate open space policies will require both acquisition of new, and preservation of existing, open space. In housing-rich areas, it may be desirable to transfer portions of existing open space out of immediate public control. Balanced areas will wish to preserve existing open space and provide for future acquisition contingent upon increased open space demands. Various tools are available to implement acquisition, preservation, or transfer of open space.

Acquisition of Open Space. The following are tools by which to acquire open space.

- o Acquisition of Fee Simple Interest. Public ownership of open space land in fee simple affords the most complete control over such land; however, high costs may render full fee acquisition impractical.

  - -- Outright Purchase. This is the most common and direct method of acquiring open space. Prohibitive expense and/or inadequate market supply may make outright purchase impossible, although surplus state and federal land, if available, may be purchased by public entities at a 50% or better discount from market value. Further, acquisition costs may be defrayed through the use of "purchase and leaseback" arrangements.

  - -- Installment Purchase. This method allows public agencies to "amortize" their acquisition costs over the "life" of the installment purchase agreement. Drawbacks are that in the aggregate, amortized acquisition costs may be higher than the costs of outright purchase, and that title does not vest in the public agency until all installments have been paid.

  - -- Eminent Domain and Excess Condemnation. These methods may be appropriate where suitable open space property is not on the market and owners of such property will not sell it voluntarily. Use of eminent domain and

excess condemnation require proof of a "public purpose" (a term which probably encompasses open space, see Hawaii Housing Authority v. Midkiff, 467 US 229 (1984)), and payment of "just compensation" (usually interpreted as fair market value) to the owner of the condemned property. Thus, costs may be as high as those associated with outright purchase, possibly higher depending on attendant legal expenses.

-- Tax Foreclosure. This method allows public agencies to acquire tax delinquent property for open space use, subject to possible owner/taxpayer protections afforded by law.

-- Dedication Requirements. As a condition of development, public agencies may extract land from developers of new tracts, or money in lieu of land, for open space use/acquisition.

-- Gifts. The use of incentives such as tax deductions or credits may encourage outright gifts of property or sales at reduced prices.

o Acquisition of Less than Fee Simple Interest. By acquiring less than all of the property rights in a given parcel, a public agency may realize open space objectives without incurring the substantial costs associated with full fee acquisition.

-- Easements. Easements are used to obtain or preserve access to and from open space areas, or for scenic purposes, i.e., to acquire or preserve "viewsheds." Easements may be purchased, acquired via condemnation or arise "proscriptively" if certain criteria are met.

-- Purchase and Resale with Deed Restrictions. By this method, the public agency purchases (or condemns) property in fee, then sells the property with deed restrictions limiting development. The net "cost" will be the diminution in the property's value due to the restrictions limiting its development.

-- Leases. Leases allow the control of property as if in fee. However, leases are of limited duration and rental expenses must be recouped during the term of the lease, if at all.

-- Licenses. Licenses are useful in obtaining specific rights in property such as hunting and fishing. Like leases, they are of limited duration.

-- Purchase of Development Rights. The right to develop property is severable from other incidents of ownership. Thus, a public agency can forestall development by purchasing the rights to develop or, possibly, acquiring them through eminent domain. In either event, once acquired, the development rights are freely transferable and may be sold by the public agency as appropriate.

o Preservation of Open Space. Through the exercise of the police power in various zoning and regulatory schemes, local governments can effectively preserve existing open space without acquiring any ownership interest in regulated properties. To the extent that zoning and regulations are not "unreasonable," no compensation will be required. Agencies can avoid the "unreasonableness" issue by framing regulations in terms of incentives, such as tax incentives to keep land in agricultural use or density bonuses in return for open space dedication.

o Transfer of Open Space. It is not recommended that publicly held open space be transferred in fee simple. The transferring governmental agency should retain at least a reversionary interest which would revest at some stated time or event, such as "improper" development. In transferring less than a fee simple, the public agency may impose such conditions on the transfer as will provide adequate flexibility to deal with changing open space needs in the future.

PRELIMINARY

APPENDIX 6

GROWTH CONTROL CONTINGENCY ANALYSIS

Submitted for Inclusion in the

Southern California Association of Governments

Growth Management Plan, 1988

by

THE PLANNING INSTITUTE
SCHOOL OF URBAN AND REGIONAL PLANNING
UNIVERSITY OF SOUTHERN CALIFORNIA

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I. OVERVIEW OF GROWTH CONTROL CONTINGENCY

A. Assumptions for regionwide growth control.

SCAG's Baseline Growth Projection provides a backdrop against which to consider several different future contingencies. This discussion explores the form that such a growth control contingency might take, and the impacts it would cause within the six-county region. The analysis and impact discussion which follows is based on informed judgement and, often, informed speculation. To the extent possible, past experience and research findings have been brought to bear on what is essentially a new ballgame: the discussion of widespread growth limitations in a region with a 'boom-town' history and legacy. The estimates and depictions that follow are, nevertheless, useful in prompting a discussion of development alternatives by elected officials and the public.

All of the growth assumptions discussed in this section have been developed by the Southern California Association of Governments to illustrate the regionwide effects of widespread population, housing, and employment curbs. A word about terminology is appropriate at this point. The Growth Control contingency looks at potential population and employment cuts measured against the Baseline Growth Projection. While regional totals would be lower under the scenario, this is not a no-growth scenario.

Growth allocation variations: more centralized, more decentralized, extremely decentralized.

SCAG has assumed a centrist position on centralization vs. decentralization, constructing a contingency that shows growth cutbacks across the board. Both urban and urbanizing areas are affected, although to different degrees. Urban areas include subregions located within the existing developed portions of Los Angeles and Orange Counties. Urbanizing areas are characterized as developing subregions on the urban fringe, such as southeast Orange County, Ventura County, and the edges of the Inland Empire. The following assumptions summarize the contingency's balancing of centralization/decentralization:

For urban areas:

A 12% reduction in housing growth occurring during the first five years of the projection period, doubling to a 25% reduction for twenty years, until 2010.

A 7% reduction of commercial floor space during the first five years, followed by a 15% reduction in the remaining twenty years, until 2010.

For urbanizing areas:

A 15% reduction in housing growth occurring during the first five years of the projection period, with a 30% reduction in the remaining twenty years.

A total 25% reduction in commercial floor space in the Southeast Orange County subregion, phased in at 12% during the first five years, and 25% through the year 2010.

The phased implementation of these growth controls reflects the delayed reaction that most jurisdictions would experience due to approved building permits in the pipeline. This adjustment period has been most notable as northern San Diego County begins to comply with

its regionwide growth control ordinance.

Residential vs. commercial growth control

These assumptions distinguish between residential and commercial growth control. To date, most growth control ordinances have established limitations on residential growth, while other city policies continue to encourage commercial development. This contingency assumes that commercial growth controls may be the most potent force in steering development to one part of the region or another -- or outside the region. Housing limits fail to extinguish the demand to live in a given area, but lack of economic activity is far more persuasive in the final analysis.

This coupling of residential and commercial controls is certain to be debated. While delivering a one-two punch to growth in a given subregion, this linkage will also affect the so-called 'balance' between jobs and housing. The likely impacts on jobs/housing balance will be explored in the discussions of impacts, in later sections of this report.

B. Implementation Issues

Growth control variables

The growth control contingency postulated by SCAG facilitates an understanding of the magnitude of the consequences of widespread growth limitations. Knowing with reasonable certainty that a 10% cut-

back in the construction sector will double unemployment in the region is an informative measure of the costs of slow growth initiatives. But there will be important jurisdictional differences in: the character of control initiatives and legislation; the quality of enforcement; and the propensity for engaging in illegal circumventions we might find among enterprising or desperate citizens. Surely such differences will exist and will distort some spatial impacts extrapolated from the model. For example, we may find much more 'bootlegging' in the older developed areas of Los Angeles and Orange Counties than the model can report.

It is also important to recognize that the current wave of growth control, since it is politically rather than bureaucratically or technically driven, is not merely a large version of our past experience with conventional planning controls. If nothing else, a regionwide control movement would not easily allow the shift of demand for housing or employment from one city to an adjacent jurisdiction. In fact, we cannot be sure of how that demand factor will play out in an environment marked with constrained supply. In effect, the SCAG contingency seals up the 'leaks' in the system for exploratory purposes.

In the rush for more restrictive control of growth, different approaches towards that objective are evolving, yielding very different mechanisms. Some existing growth control initiatives call for a ceiling on new construction, either directly (number of dwelling units per year) or indirectly (number of sewer hook-ups per year). These do not allow for precise predictions of the consequent amount of construction because the size of each dwelling unit and the size of the

population may expand. The employment, fiscal, and housing impacts of these initiatives might vary widely.

Other control initiatives set performance standards, such as the traffic impact of development. These are more complicated policy devices and their impact may depend on the cost of meeting those standards in relation to project feasibility. For example, some new projects might meet traffic standards through relatively low-cost traffic and demand management (e.g., staggered work hours, carpooling, one-way street systems). Others may require major road and highway improvements with costs that would make the project infeasible. As a result, it is difficult to have a precise understanding of how any growth control strategy will play out in the development of the region. The SCAG contingency discussed herein avoids the ambiguities of such policy devices.

Local zoning as a current growth control mechanism.

We must also be aware of the contradictions we face between local aims and regional needs. Local growth control as currently practiced through zoning, subdivisions and specific plans, is designed to protect or enhance local competitive advantage, fiscal health, and community self-image. San Marino restricts land use to single-family homes and minor retail and office use. Thousand Oaks tries to limit housing while encouraging commercial and industrial/office development. Some counties may be eager to preserve open space in order to maintain a way of life or provide an antidote to environmental insults. None worries about the lateral effects on surrounding communities or jurisdictions. Indeed, from the local point of view, these may be

legitimate interventions. But, from a regional point of view, they may work against job/housing balance; the contingency is not a jobs/housing balance solution.

This last point, of course, is one raised in earlier discussions of contingencies. The significance here is that efforts at a regional level to create a balance between housing and jobs so as to reduce the journey-to-work may take the form of 'deregulating' local controls. We are unable to make a legal judgement about the comparative power of regional authority in the face of strong local controls created by ballot box initiatives, but the rationale for creation of an authority at the regional level would certainly be based on the need to undo or coordinate important aspects of local planning and control. This, of course, raises at least two points: a) this could be a formidable, perhaps insurmountable, exercise from a political point of view; and b) the local consequences of regional intervention may create other unanticipated problems, both and technical and political.

The electorate's response.

Finally, we must recognize that local and county initiatives for the control of growth reflect widespread agitation, borne out of frustration and fear, converted into political will. The forces that create and feed it and the strength of that public will is subject to change. If the current round of initiatives succeeds, the very consequences we are exploring here vis a vis housing and employment, may alter the political mood of the electorate and their representatives. Local reactions to negative consequences, particularly such 'bread and butter' consequences as substantial increases in unemployment, may reduce

enforcement or even cause the passage of counter-initiatives repealing growth control measures. The place and time of such reactions, were they to occur, would alter our analysis of the impact of growth control and its consequences well into the future. If the slow growth movement reflects a temporary mood among the electorate, one that might soon be displaced by other worries, then the impact of current initiatives is harder to trace.

Nevertheless, the exercise undertaken here helps us understand some of the dimensions of change we might characterize as the 'ripple effect', caused by sizable cutbacks in construction jobs. It is a reasonable analysis that is illuminating as well, one that confirms fears that slow growth in a region that has been dependent on growth for so long will have serious adverse effects on jobs and housing, whatever consequences it may have for air quality and traffic.

II. POTENTIAL IMPACTS OF REGIONWIDE GROWTH CONTROL

A. Primary Impacts

1. Population Impacts

Growth trends represented in the Baseline Forecast would result in a 47% total increase in regional population from 1984 through 2010, according to SCAG. This translates into 1.9 million more urban residents by 2010. In contrast, nine urbanizing regions would attract 113% more residents, an absolute increase of 3.1 million people. Urban subregions would have three times more residents than urbanizing subregions.

How would growth control change these figures? Given the changing ethnic and economic mix of the region's residents, and given the tremendous capacity flexibility in the housing stock, population growth may not be deterred by either housing or employment cutbacks. Lower income households would not have the resources to relocate. Many individuals and families would cope with housing and income constraints by doubling-up. The region's population would age more rapidly than otherwise, and older residents are less likely to relocate. The area's magnetism for both domestic and foreign immigrants may survive growth control if the region remains attractive relative to other regions. As a result, growth under this contingency would be distributed mainly to urban subregions, further increasing densities.

Those most able to exit the region in search of more plentiful housing and jobs would be the affluent and the young, leaving behind a more

service dependent population. Given the Proposition 13 and Proposition 4 impacts on local government revenues, these service are not likely to meet the demands. This consequence has far reaching social implications.

2. Employment Impacts

We have developed a number of employment forecasts for the (five-county) study area that can be used to identify prospective traffic and development impacts. Our employment forecasts include systematic sensitivity analyses performed for a growth control contingency and are developed using the Southern California Planning Model (SCPM).<1> The Southern California Planning Model (SCPM) facilitates analyses of shifts in economic activity. A description of the model follows.

In order to test the spatial impacts of various changes in the economic environment, we developed a hybrid model that merges a standard regional input-output model with the traditional (Garin-Lowry model) approach to spatial allocation. The merit of our approach is that we are able to trace impacts of a large number of economic contingencies on sub-areas and on economic sectors.

The heart of the SCPM is a 66-sector input-output model for the SCAG region. SCAG staff developed the I/O model from a much larger national model, using local data to 'regionalize' (adapt to local economic conditions) the production coefficients. These technical

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<1> While SCAG's forecasting models also project jobs by geographic areas, our model allows such forecasts to also be sector-specific.

coefficients can, of course, be altered to test the impact of various changes in production technology. It should be noted, however, that recent experimental work (Feldman, McClain, Palmer, 1987) indicated that, over a fifteen-year time span, final demand changes accounted for most of output growth. This justifies sensitivity tests based on final-demand perturbations, leaving the technical coefficients intact. It also suggests that demand-driven changes, which skip over the longer-term supply-side adjustments do dominate for as much as fifteen years.

The I/O model includes 1980 'baseline' purchases by six final-demand sectors, from each of the sixty-six industrial sectors. Selected changes of these elements allowed us to test some of the suggested economic contingencies. Results of various model runs had to be aggregated to twelve economic sectors since the rest of 1980 baseline data were only available for this level of aggregation.

Our model uses a sixty-five sub-area division of the five-county area (reduced to fifty-eight areas, for reporting purposes, because of sparse data for the outlying nonurban sub-areas). Nineteen of the sixty-five sub-areas are 'centers' (see Tables A1 and A2); the remaining forty-six sub-areas are SCAG RSAs, but with the 'centers' removed. A (65 X 65) journey-to-work matrix, developed from 1980 UTPP data is a key model ingredient. We have also created a non-work trip matrix for the same sixty-five origins and destinations. These data are from the 1976 'LARTS' survey. This matrix might be called a 'journey-to-shop' matrix.

1990, 1995, 2000 Baseline and Growth Control Employment

The various inputs are subject to updating and 'fine-tuning'. For this analysis, we were able to update the final demand information to create 'baseline' employment levels (for sectors and/or areas) for 1990, 1995, and 2000. To suggest the employment impacts of growth control measures, we also ran the SCPM for 10, 20, and 30% final demand decreases (from baseline) of the construction sector activities.<2> Why focus on construction jobs? Construction employment will be the first to be affected by a drop in commercial and residential development, restrictions on building and demolition permits, etc. In turn, economic sectors that depend on construction will feel the secondary impacts. These interactions are fully captured by the model. The model outputs, then, are interpretable as the full (annual) economic consequences of such cutbacks. Table 1 and Tables 2.1 through 2.3 summarize the job reduction impacts that can be pinned to three levels of employment cutbacks.

<2> The original I/O model treats most construction final demand as coming from the 'capital accumulation' sector. Accordingly, this is where we indicated the various cutbacks.

TABLE 1

FIVE-COUNTY 'BASELINE' EMPLOYMENT PROJECTIONS,
TWELVE LOCAL ECONOMIC SECTORS
(and percent change from 1980)

SECTOR	1990	1995	2000
Construction	288,691(31.5)	313,718(42.9)	336,550(53.3)
Manufacturing	1,504,503(28.2)	1,556,139(32.6)	1,601,908(36.5)
Transportation	414,981(30.1)	443,051(38.9)	469,844(47.3)
Wholesale	278,892(26.2)	291,046(31.7)	312,483(41.4)
Retail	1,020,272(35.6)	1,089,494(44.8)	1,158,716(54.0)
Finance	431,673(25.7)	464,640(35.3)	497,265(44.8)
Business Services	438,833(65.4)	503,570(89.8)	586,348(121.)
Entertainment	340,816(45.4)	372,460(58.9)	399,181(70.3)
Professional Services	1,289,374(42.1)	1,431,831(57.8)	1,531,642(68.8)
Public Administration	218,030(27.6)	227,428(33.1)	236,997(38.7)
Agriculture	60,949(5.3)	63,264(9.3)	65,174(12.6)
Mining	12,053(-4.9)	11,812(-6.8)	11,787(-7.0)
TOTAL	6,299,066(34.6)	6,768,455(44.7)	7,207,896(54.1)

source: SCPM outputs

TABLE 2.1

CONSTRUCTION SECTOR CUTBACKS' EMPLOYMENT IMPACTS, THREE SCENARIOS,
TWELVE LOCAL ECONOMIC SECTORS
(and percent change from 1990 'baseline')

	Construction Sector Cutbacks		
	-10%	-20%	-30%
SECTOR			
Construction	-68131(-23.6)	-90072(-31.2)	-111723(-38.7)
Manufacturing	-37613(- 2.5)	-49649(- 3.3)	-60180(- 4.0)
Transportation	-13694(- 3.3)	-18259(- 4.4)	-22409(- 5.4)
Wholesale	-6972(- 2.5)	-9203(- 3.3)	-11435(- 4.1)
Retail	-39791(- 3.9)	-53054(- 5.2)	-65297(- 6.4)
Finance	-3885(- 0.9)	-5180(- 1.2)	-6475(- 1.5)
Business Services	-13604(- 3.1)	-17992(- 4.1)	-22380(- 5.1)
Entertainment	-3067(- 0.9)	-4090(- 1.2)	-5112(- 1.5)
Professional Services	-91546(- 7.1)	-121201(- 9.4)	-150857(-11.7)
Public Administration	-5233(- 2.4)	-6759(- 3.1)	-8503(- 3.9)
Agriculture	-1219(- 2.0)	-1585(- 2.6)	-2011(- 3.3)
Mining	-675(- 5.6)	-892(- 7.4)	-1109(- 9.2)
TOTAL	-285429(- 4.5)	-377936(- 5.9)	-467492(- 7.4)

source: SCPM outputs

TABLE 2.2

CONSTRUCTION SECTOR CUTBACKS' EMPLOYMENT IMPACTS, THREE SCENARIOS,
TWELVE LOCAL ECONOMIC SECTORS
(and percent change from 1995 'baseline')

	Construction Sector Cutbacks		
	-10%	-20%	-30%
SECTOR			
Construction	-74038(-23.6)	-97880(-31.2)	-121723(-38.8)
Manufacturing	-40460(- 2.6)	-52909(- 3.4)	-66914(- 4.3)
Transportation	-15064(- 3.4)	-19937(- 4.5)	-24811(- 5.6)
Wholesale	-7567(- 2.6)	-10187(- 3.5)	-12515(- 4.3)
Retail	-43580(- 4.0)	-57743(- 5.3)	-71907(- 6.6)
Finance	-4182(- 0.9)	-6040(- 1.3)	-7434(- 1.6)
Business Services	-15107(- 3.0)	-19639(- 3.9)	-24675(- 4.9)
Entertainment	-3352(- 0.9)	-4470(- 1.2)	-5587(- 1.5)
Professional Service	-100228(- 7.0)	-131728(- 9.2)	-164661(-11.5)
Public Administration	-5686(- 2.5)	-7505(- 3.3)	-9325(- 4.1)
Agriculture	-1329(- 2.1)	-1771(- 2.8)	-2151(- 3.4)
Mining	-732(- 6.2)	-969(- 8.2)	-1205(-10.2)
TOTAL	-311324(- 4.6)	-410779(- 6.1)	-512906(- 7.6)

source: SCPM outputs

TABLE 2.3

CONSTRUCTION SECTOR CUTBACKS' EMPLOYMENT IMPACTS, THREE SCENARIOS, TWELVE LOCAL ECONOMIC SECTORS
(and percent change from 2000 'baseline')

	Construction Sector Cutbacks		
	-10%	-20%	-30%
SECTOR			
Construction	-79762(-23.7)	-105340(-31.3)	-130918(-38.9)
Manufacturing	-43252(- 2.7)	-57669(- 3.6)	-72086(- 4.5)
Transportation	-15975(- 3.4)	-21143(- 4.5)	-26311(- 5.6)
Wholesale	-8125(- 2.6)	-10937(- 3.5)	-13437(- 4.3)
Retail	-46349(- 4.0)	-61412(- 5.3)	-76475(- 6.6)
Finance	-4973(- 1.0)	-6464(- 1.3)	-7956(- 1.6)
Business Services	-15831(- 2.7)	-21109(- 3.6)	-26386(- 4.5)
Entertainment	-3593(- 0.9)	-4790(- 1.2)	-5988(- 1.5)
Professional Services	-107215(- 7.0)	-142443(- 9.3)	-176139(-11.5)
Public Administration	-6162(- 2.6)	-8058(- 3.4)	-9954(- 4.2)
Agriculture	-1434(- 2.2)	-1890(- 2.9)	-2346(- 3.6)
Mining	-790(- 6.7)	-1037(- 8.8)	-1297(-11.0)
TOTAL	-333459(- 4.6)	-442292(- 6.1)	-549292(- 7.6)

source: SCPM outputs

The model outputs shown here depict employment growth for the five-county area, by sector, under conditions of no major setbacks for three near-term years, 1990, 1995, and 2000 (Table 1). The next three tables show how each year's baseline employment levels would drop under three possible construction industry cutbacks, such as might follow from the building activity restrictions that would accompany the growth control contingency.

1. In the absence of major setbacks, regional economic ('baseline') growth can be expected to be robust and broad-based (Table 1). Manufacturing will continue to be the dominant sector with services posting the biggest gains. Construction jobs (as defined by the I/O source rather than the UTPP definition) will continue to be a major employer.

2. While the construction sector would be hit first and hardest by development curbs, significant secondary impacts would filter throughout the economy (Tables 2.1-2.3). For example, the mildest cutback studied suggests that more than 37,000 manufacturing jobs would be lost, as a result of development curbs in a single year, 1990.

3. Across the board, even the most modest of the construction cutback scenarios suggests an approximate doubling of the present regional unemployment rate (now near 5%).<3> This represents a considerable economic loss to the regional economy. It parallels the opportunity

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<3> Interestingly, the 1997 job loss forecast by the Chapman College Center for Economic Research for Orange County suggests that a 15% reduction in development activity would reduce County jobs by 6.8%. This is quite consistent with our results.

costs incurred during a major recession.

4. These nine annual (or 'snapshot') forecasts cannot be aggregated into total man-years-lost since the time that it takes for a displaced worker to move to a more prosperous economic sector (or region) is not known. Yet, this relationship is key to determining the regional economy's resilience in adjusting to employment growth constraints. It is an area that would benefit from further study, being beyond the scope of this report.

5. The impacts of construction employment cuts are likely to be distributed evenly around the region, rather than concentrated in either urban or urbanizing subregions. Construction employment is not associated with fixed work sites but, rather, takes place wherever development activities are most pronounced. We might expect that job loss impacts by place of residence would be greatest wherever construction workers are most likely to live. Yet, construction workers' residences are spread almost ubiquitously throughout the study area.

3. Housing Impacts

Significant growth controls in a region with very much a 'boom-town' past can have wide-ranging impacts. Some of these, such as primary and secondary job losses (section B1), can be more easily predicted than the more complex and more numerous sorts of adjustments that consumers and producers might make. Planners and lawmakers have, over the years, learned that people often accommodate to curbs in unexpected ways, often obviating the intent of the new rules.

The following discussion of likely housing impacts suggest some wide ranging accommodations that we might see under a regime of strict growth limits. Two categories of reaction are expected: A) the impedance of normal housing market activities, and B) increased irregular market activities.

Impedance of Normal Housing Market Activities

A. Substitution of remodeling and rehabilitation for new construction. Since 25% or more of the potential new supply of housing will be cut off in SCAG's growth control scenario, it is likely that (1) there will be more intensive 'infill' development in the exitsing urban subregions but that (2) it will not be enough to make up for the foregone units. Hence, most of the households denied new housing will seek to improve their shelter through remodeling -- either of their existing units or another. These efforts will occur in:

(a) areas of middle-to-high social status;

(b) areas with generous lot sizes;

(c) communities with good public services;

(d) other things equal, in areas proximate to natural and/or people-made landmarks, i.e., hills, golf courses;

(e) the 'westside' or areas nearer the coast; units in these high-price areas are more apt to be completely re-done through 'tear-downs' and rebuilding (a la Santa Monica);

(f) areas further inland but still on the region's westside, the San Fernando Valley, and the eastside;

these areas will probably see more
second stories added to post-WW II units
in mid-priced areas, or merely room additions if the
larger lots permit

In short, to see where housing investments will be made, look at the already expensive areas. They will become more so. The housing cuts would be concentrated outside these areas.

B. Reduced mobility for households. By the same token, mobility (the move from one housing unit to another) will probably decline. Residents will be more likely to upgrade rather than move. Turnover rates will fall. In many cases, the costs of moving foregone will be invested in upgrading the existing units.

Reduced mobility will also increase the likelihood of 'mismatches'. There will be an increased mismatch between the types of housing people want or need, and what they will be able to get. Mismatches between place of work and place of residence (see section B1) will also increase.

C. Reduction in vacancy rates. There will be a reduction in the vacancy rates. A 50% reduction might be a reasonable estimate. This will have the effect of pushing up rents and prices. In some communities, this will create pressures for rent-control laws. The effect would be to further reduce turnover and vacancy rates. Owners will be tempted to remove low-rent units from the market, converting them to more profitable non-residential uses. The latter effect will take place near shopping areas -- and in areas that are older with weaker

neighborhood associations.

D. Increased doubling up of smaller households. Single-person renter households (and many others) will face higher rents which will encourage them to either (a) move in with someone else, or (b) take in a roommate. This will alleviate a small portion of the problem caused by the reduced vacancy rate. These are also the people most flexible in responding to tight markets. In the case of the elderly, there will be heightened interest in sharing a single-family house (such programs are already underway -- this will merely give them a boost). This overall increase in household size in impacted areas will be a major reversal of longstanding regional trends. These disadvantages will probably not impact newly arrived households to the same degree, as immigrants will generally come from areas with higher household size.

E. Increased doubling-up by poor. Previous adaptations address mainly the moderate-to-upper income group behavior. The poor, already hardpressed to meet a housing cost that is often well over the recommended 23-30% of income, will be the hardest hit; their budgets are already stretched, even if the absolute increase in rent is less than for moderate income persons. Some of the poor will have to resort to the doubling-up of families or households, with accompanying increased social, familial, and neighborhood tensions. The low room-occupancy rate of the existing stock, however, suggests that other problems of doubling-up aside, much of the increased occupancy can occur without exceeding current norms for overcrowding. Social pathologies, including the crime rate, might be nudged upward.

In response to all these pressures, members of all income groups will

be prompted to consider illegal housing market activities (below).

Increased Resort to Irregular Market Activities

A. Increased 'bootlegging' of housing units. There is already widespread resort to 'bootlegging' of illegal units or rooms in the older housing stock -- including the use of garages, sheds, balconies, porches and chickencoops, recreational vehicles, and cars for residential space. So fast has this practice grown, that some building inspectors report that past neighbor objections have virtually ceased in many areas -- most everyone is or wants to be in on the 'scam'. This practice will become more pronounced in lower-middle income areas, causing some initial neighborhood conflicts -- though this reaction will probably become rarer as bootlegging becomes evermore lucrative.

B. Increased illegal overcrowding by the poor. Minimal upgrading will take place in the poorer areas. Yet, there is substantial opportunity for increased population density in these neighborhoods too, since most plausible residential nooks and crannies will be exploited for income, as well as for familial and social obligations.

This increased overcrowding, especially in backyards, will put a strain on older plumbing facilities already in deteriorated condition. The apparent practice of 'slit trenches' in the backyards, for people living in garages, etc. may prove a serious health problem as the backyards' capacities to accommodate temporary sanitation solutions are exhausted.

C. Increased shadow market activities. Older industrial and commercial areas may be faced with opportunities to provide temporary shelter in the near term, as owners await forthcoming opportunities to capitalize on the increased land value as new commercial developments get choked off as well.

3. Locational Overview

It seems likely that middle-to-upper income areas (and communities) will be able through the law and social pressure, to bring about what is from their perspective a desirable result -- increased property values with only a slight to moderate increase in population, with slight impairment of adequate infrastructure. By contrast, poorer areas will absorb more population (although the percentage increase might not be so great because there is a higher density already) with less increase in value, and with greater pressures on and use of a more deteriorated infrastructure. Thus, the urban/urbanizing distinction may be far less important than community income levels in determining housing impacts.

B. Secondary Impacts

1. Transportation Impacts

Transportation considerations weigh strongly in discussions of growth controls. Traffic is often the harbinger of growth and usually brings on political reactions, including efforts to block further growth. The popular association of traffic with development is probably wrong since it skips over traffic management options that would allow

existing facilities to handle greater demand -- often at greater speeds: witness traffic management successes during the 1984 Los Angeles summer olympics. More importantly, our recent research suggests strongly that growth controls will have the unintended effect of worsening traffic conditions. Those who believe the opposite probably misunderstand settlement trends in modern American cities.

Suburbanization has long been the dominant spatial trend in U.S. cities. Obviously, it represents the lifestyle choice that most of us make and is, in great part, made possible by the range and mobility afforded us by cars and highways. This widely acknowledged trend must be coupled with the less well known fact that industry's most potent locational pull is labor. Commuting economies are benefits that jointly accrue to workers and to their employers. Firms have learned that shorter worktrips are a lure, helping in employee recruitment and retention. In addition, productivity gains associated with a shorter trip are widely perceived by managers. The upshot is that firms have been following the work force into the suburbs. Today, most jobs and certainly most job growth are suburban. Most commuting is suburb-to-suburb.<4> Contradicting the widely held expectation that inefficient

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<4> Pisarski (1987) substantiates this claim using data from the 1980 Census' journey-to-work files. Our own studies draw on the 1977 and 1983 Nationwide Personal Transportation Study(ies) and reach many similar conclusions. A good summary of Census results for the 'urbanized areas' is in the following table; average minutes for the one-way worktrip are shown; the best trip times are in the right-most column; these are the suburb-to-suburb commutes.

Living:	ins. central city			outs. central city		
Working:	CBD	ins.CC	outs.CC	CBD	ins.CC	outs.CC
ALL UAs	24.9	20.0	26.4	35.1	27.2	18.8

cross-hauling would accompany 'sprawl', we have used a variety of data sources to corroborate the idea that suburb-to-suburb trips are likely to be shorter and quicker than those downtown. They also remove some of the pressure on downtown routes and limit traffic congestion there.

Indeed, whereas suburban labor is usually the pull when businesses pick sites, downtown congestion is often the push. Together, the push and the pull forces resulted in just 3% of the Los Angeles Urbanized Area's jobs being in the downtown; San Francisco's downtown accounted for 11%; the other major urbanized areas fell within this range.<5>

We have tried to identify the full complement of sub-centers in the greater Los Angeles area and have found nineteen major foci -- including a greatly expanded definition of downtown. Yet, together these account for just 17.5% of the area's jobs. The other 82.5% are so thinly spread that it is hard to identify clusters that resemble traditional 'centers.' The Washington Post recently discovered that even the capital was subject to 'Los Angelization'. The process is apparently widespread, in part, because it is economical in terms of travel and travel time. Suburbanization is a part of the traffic solution rather than a part of the problem. Fears of inefficient 'sprawl' must be reassessed. Also, doomsday 'gridlock' forecasts must be looked at skeptically. Both underpin too many expensive transportation and

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25 LARGEST UAs	33.4	25.5	29.9	42.1	33.0	19.5

Source: compiled from, U.S. Department of Transportation (1985) Demographic Change and Worktrip Travel Trends, Volume II

<5> Ibid.

development plans.

These findings suggest a reassessment of many of the arguments for development controls. The most important news about the suburbs is that this is where many jobs are going -- following the labor force. Thus, most 'imbalance' is, essentially, self-correcting.

Residential development usually 'leads' and there is a lag until industry arrives. Yet, it must be emphasized that suburbanization is the most potent traffic decongestant feasible for this region. It follows that planners and politicians should allow this favorable spontaneous process to unfold. Problems are most likely to arise when restrictive zoning measures prevent industrial deconcentration or when 'slow growth' or 'growth centers' policies limit it. Much of the debate on growth controls can be viewed in this context. Our research affirms that dispersed settlement patterns provide the most favorable travel conditions. This is because firms do follow the labor force, limiting cross-hauling and providing for shorter worktrips. The fact that these trips also take pressure off the traditional core enhances the traffic benefits. Growth controls are likely to place a wedge between the natural tendency for businesses and residences to co-locate in the newly developing areas. If so, they are likely to give rise to longer trips, ironically worsening traffic conditions.

2. Economic and Fiscal Impacts

While most of the economic impacts of growth controls are included in our discussion of employment losses (section A2), there are further effects on the fiscal position of local governments that require elaboration. Fewer people and/or fewer jobs certainly mean fewer revenues for local governments. The average local government in this region collects about $750 per year (all sources) per local resident plus another $450 per local worker. There are, of course, wide variations about these means since the various jurisdictions collect revenues in different ways. Yet, given the rough population and employment impacts that have been suggested in other parts of this report, a region-wide fiscal impact projection is possible.

The more interesting part of the analysis, however, has to do with the likely mismatch between revenues and expenditures. Our discussion of housing impacts has suggested that significant evasions of growth limitations are possible given the flexibility of the housing stock and the inventive nature of most residents and new arrivals when faced with administrative curbs on market activity. It is quite likely, then, that more residents than apparent will live within the borders of many local jurisdictions, placing continued demands on services (especially emergency services) while remaining invisible on the tax rolls.

Local governments have been coping with the Proposition 13 and Proposition 4 aftermath by relying on developer fees and exactions. Growth controls would certainly limit these sources. The whole fiscal predicament will force new trade-offs, cutbacks, and a search for

alternate revenue sources.

3. Socioeconomic impacts

As noted in our discussion of population impacts, the affluent and the young would be those most likely to leave (or avoid) the region, in search of new housing and employment, if the strictures of growth control become severe enough. The median age of residents would rise. The population would be older, less affluent, less mobile, more service dependent, and certainly less entrepreneurial.

Minorities would be disproportionately affected. Minority households are typically large in size, and doubling-up is already visible in many of the region's minority enclaves. These factors suggest some coping mechanisms that will have to come into play if housing and jobs become harder to find. Lacking the income for home ownership, many minority households will concentrate in the communities having a larger rental housing stock. These minority concentrations are, of course, in the urban subregions. These subregions would be challenged to provide more services, especially schools. Ethnic tensions will probably be strained if competition for limited opportunities increases.

Our housing impact discussion identified several socioeconomic reactions to housing shortages and overcrowding, including family tensions and the potential for increased criminal activity. Lack of jobs could lead to more informal economic activity such as bartering and street vending. Crime as a career choice would also be considered by more

young people.

Elderly, disabled, minority and single-parent households would receive less social service support, as suggested in our discussion of fiscal impacts. Development exactions that have filled much of the funding gap left by Propositions 13 and 4 would be cut off, further limiting local governments' abilities to serve the needs of the changing populations.

Most of the socioeconomic benefits of growth control would be enjoyed by middle income homeowners who are not impacted by the projected employment cutbacks. The enclaves as well as the service facilities available to these groups would be less congested since access to them will be restricted compared to the normal economic development scenarios.

APPENDIX TABLES

TABLE A1
THE SPATIAL DISTRIBUTION JOBS AND PEOPLE: MAJOR ACTIVITY CENTERS
LOS ANGELES FIVE-COUNTY AREA, 1980

Center	Pop.	# of Workers	Gross Acres	Pop./ Acre	Jobs/ Acre
1. L.A. Core	148,305	373,283	6,737	30.8	55.4
2. Westwood/ Bev. Hills/Cent. City	36,352	89,447	2,956	15.5	30.3
3. Hollywood	47,336	44,802	1,902	24.9	23.6
4. Santa Monica	2,571	37,255	1,672	6.0	22.3
5. Pasadena	20,763	35,911	1,419	14.6	25.3
6. Huntington Park	303	30,429	556	0.5	54.7
7. UCLA	11,329	30,029	607	18.7	49.5
8. Glendale	18,857	25,649	1,006	18.7	25.5
9. Mid-Wilshire	10,323	20,772	964	22.4	21.5
10. San Pedro	12,646	20,413	1,043	12.1	19.6
11. Anaheim	12,456	18,055	946	13.2	19.1
12. Long Beach	13,622	17,326	731	18.6	23.7
13. USC Medical/ L.A. County General	7,100	16,316	437	16.2	37.3
14. Riverside	3,768	14,166	661	5.7	21.4
15. Burbank	6,627	12,703	707	9.4	18.0
16. East Hollywood	13,513	12,383	418	32.3	29.6
17. East Los Angeles	7,322	10,471	593	12.4	17.7
18. San Bernardino	928	7,324	320	2.9	22.9
19. Ontario	1,464	4,974	305	4.8	16.3
TOTAL	375,585*	821,708*	23,980	15.7	34.3

* 3.4% and 17.5% of the five-county area's totals, respectively.
sources: Computed from 1980 UTPP data; centers are AZs with highest trip generation densities.

TABLE A2
THE SPATIAL DISTRIBUTION OF EMPLOYMENT: MAJOR ACTIVITY CENTERS
LOS ANGELES FIVE-COUNTY AREA, 1980

Center	# of Workers	Gross Acres	Jobs/ Acre	Est. 24-Hr. Trip Generat. (000s)
1. L.A. Core	373,283	6,737	55.4	4,350
2. Westwood/ Bev. Hills/Cent. City	89,447	2,956	30.3	1,245
3. Hollywood	44,802	1,902	23.6	784
4. Santa Monica	37,255	1,672	22.3	563
5. Pasadena	35,911	1,419	25.3	445
6. Huntington Park	30,429	556	54.7	223
7. UCLA	30,029	607	49.5	374
8. Glendale	25,649	1,006	25.5	340
9. Mid-Wilshire	20,772	964	21.5	306
10. San Pedro	20,413	1,043	19.6	271
11. Anaheim	18,055	946	19.1	246
12. Long Beach	17,326	731	23.7	270
13. USC Medical/ L.A. County General	16,316	437	37.3	140
14. Riverside	14,166	661	21.4	177
15. Burbank	12,703	707	18.0	206
16. East Hollywood	12,383	418	29.6	155
17. East Los Angeles	10,471	593	17.7	182
18. San Bernardino	7,324	320	22.9	147
19. Ontario	4,974	305	16.3	84
TOTAL	821,708*	23,980		

* 17.5% of the five-county area's total

sources: Computed from 1980 UTPP data; centers are AZs with highest trip generation densities.

IDENTIFICATION OF FIFTY-EIGHT STUDY AREAS

1. Los Padres, Ventura, Oxnard, Simi, Thousand Oaks, Fillmore, Agoura RSAs, combined;
2. Santa Clarita RSA;
3. Lancaster RSA;
4. Palmdale RSA;
5. San Gabriel Mountains and S.W. San Fernando Valley RSAs, combined;
6. Burbank RSA;
7. N.E. San Fernando Valley RSA;
8. Malibu RSA;
9. Santa Monica RSA, center removed;
10. West Coast RSA, center removed;
11. South Bay RSA;
12. Palos Verdes RSA;
13. Long Beach RSA, center removed;
14. East Central RSA, center removed;
15. Norwalk/Whittier RSA;
16. Los Angeles, CBD, parts removed;
17. Glendale RSA, center removed;
18. West San Gabriel Valley RSA;
19. East San Gabriel Valley RSA;
20. Pomona RSA;
21. West San Bernardino Valley RSA;
22. East San Bernardino Valley RSA;
23. San Bernardino Mountains RSA;
24. Buena Park RSA;
25. Fullerton RSA;
26. Anaheim RSA, center removed;
27. West Coast RSA;
28. Central Coast RSA;
29. South Coast RSA;
30. Santa Ana Canyon RSA;
31. Santa Ana RSA;
32. Mission Viejo RSA;
33. El Toro RSA;
34. Jurupa RSA;
35. Riverside RSA, center removed;
36. Perris RSA;
37. Hemet RSA;
38. Lake Elsinore RSA;
39. Banning RSA;
40. Santa Monica Center;
41. Hollywood Center;
42. East Hollywood Center;
43. UCLA Center;
44. Westwood/Century City/Beverly Hills Center;
45. Mid-Wilshire Center;
46. Los Angeles Core;
47. Long Beach Center;
48. USC Medical School Center;
49. East Los Angeles Center;
50. Huntington Park Center;
51. Glendale Center;

52. Pasadena Center;
53. San Bernardino Center;
54. Burbank Center;
55. San Pedro Center;
56. Ontario Center;
57. Anaheim Center;
58. Riverside Center.

PRELIMINARY

APPENDIX 7

ECONOMIC DEPRESSION CONTINGENCY ANALYSIS

and

FEDERAL BUDGETING CONTINGENCY ANALYSIS

Submitted for Inclusion in the

Southern California Association of Governments

Growth Management Plan, 1988

by

THE PLANNING INSTITUTE
SCHOOL OF URBAN AND REGIONAL PLANNING
UNIVERSITY OF SOUTHERN CALIFORNIA

INTRODUCTION

USC's Planning Institute has undertaken a critical analysis of the Southern California Association of Government's proposed growth management plan. We have focussed on two economic contingencies:

1. What regional impacts would result from an economic depression?
2. How would a cutback in federal military expenditures in the region affect population, employment, land use, and the environment?

Each of these issue areas is complex and many layered. Policy shifts in any one area can result in numerous primary and secondary impacts -- some of them intended, and others both unintended and undesirable.

To gain a better understanding of the sensitivity of the regional growth forecast to different policy inputs, we have devised a conceptual model of urban growth which underlies each of the contingencies.

A CONCEPTUAL MODEL OF REGIONAL GROWTH

The spatial character of American cities continues to change. National trends appear to follow the Los Angeles pattern and suggest new land use and transportation patterns that still remain unrecognized in most current policy discussions. For example, many policy makers espouse centralized growth plans based on the erroneous idea that peripheral growth causes traffic and land use problems, rather than providing solutions; many transportation plans are radial and

converge on the downtown even though its relative importance continues top decline.

Our own recent studies of the Los Angeles region and other U.S. urbanized areas challenge many of the cliches of urban analysis. The results point to a policentric-to-dispersed urban form with pronounced jobs/housing balance and travel economies.

In the Los Angeles area and in most growing regions, both residential and non-residential activities tended to disengage from the regional center. In many cases, subcenters were formed. Eventually the spread of secondary centers gave rise to generally dispersed employment sites. Thus, subcentering is part of a dynamic process. The key analytical questions concerning this process are: Why do subcenters emerge? What are the conditions under which subcenters are likely to be sustained? If the advantages and implications of subcentering can be understood, inappropriate transportation, housing, and growth policies and infrastructure investment decisions that support them can be avoided. The purpose of current research must be to explore the economic and technical conditions under which competing subcenters are likely to emerge, develop, and decline.

Agglomeration and Congestion

Agglomeration opportunities originally caused firms to cluster in the regions' central business district. New firms, in turn, contributed new agglomeration opportunities, though at an ever decreasing rate. In addition, new growth eventually brought on eventual crowding and

congestion. By conventional assumption, congestion costs grow at an increasing rate. Further accretion at the center ceased when the value of the agglomeration effects experienced by a new firm locating in the CBD no longer dominated the congestion costs associated with being in the downtown, or when the value of agglomeration advantage net congestion cost was greater elsewhere in the system. This scenario is illustrated in Figure 1 in which the incentives for the center's further growth cease at S number of workers. Though infrastructure expansions in the CBD could conceivably keep up with the demand for service and mitigate congestion, the capital intensity of these investments would eventually make such strategies inefficient.

In a dynamic setting, the functions A and C in Figure 1 might shift. Their intersection could move in either direction or disappear altogether.

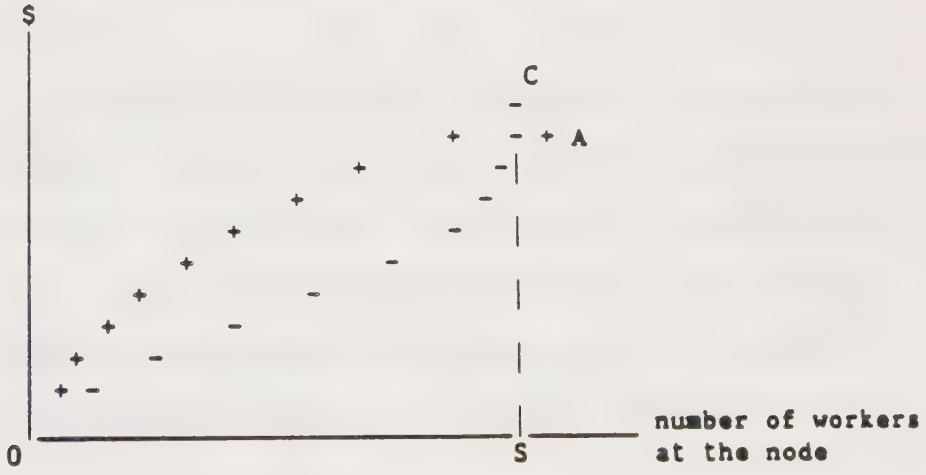

Figure 1: Agglomeration economies grow at a decreasing rate while congestion costs grow at an increasing rate; no incentive for growth exists beyond employment level S; growth is possible up to S but not assured since superior conditions may exist at at other centers.

Jobs and People

These relationships are summarized in the following highly generalized model of the SCAG region. The region grows by exporting and competing on world markets. As the region grows, its land rents and prices rise, making it less competitive in external product and factor markets. The region remains competitive if spatial arrangements emerge that make it more efficient. Such spatial arrangements are actually systems of sub-centers. Centers provide new agglomeration economies and, in turn, grow because of agglomeration opportunities they provide. Yet, growth also generates congestion that limits center size. Congestion, which accrues quickly if there are too few centers, can be alleviated by further sub-centering and/or extra (exogenous) infrastructure investments. Center sizes can be measured by numbers of jobs at each. We have, then, a model of a city in which economic growth, spatial structure, and traffic conditions are allowed to interact.

In this simple conceptual model, workers reside near the centers in which they work. This is consistent with the contention that firms demanding specifically-skilled workers follow them to their suburban residences. Greater efficiency at these centers allows higher wages to be paid. If net efficiency is decreased due to congestion, wages drop, and adjacent nodes become candidates for new agglomerations.

Jobs-Housing Balance

Our work to date with the 1977 and 1983 Nationwide Personal Transpor-

tation Study data files corroborates many of the hypotheses embedded in this discussion. For example, we have used both data sets to show that there is only very weak association between traffic congestion and city size (Gordon, Kumar, Richardson, 1987). The explanation appears to have been that the suburbanization of jobs and housing is such that worktrips in the peripheries are both numerous and quite short, moderating congestion at the city center. The number of centers, then, is a key variable explaining city-wide traffic conditions. Many traffic problems exist at the crest of the wave of development because the pace of suburban development has sometimes been so rapid that roadbuilding and other essential infrastructure investments have lagged. Outdated analysis overemphasizes investments at the regional core and underemphasizes the region's edges.

An appealing hypothesis, based on this discussion, is that there are strong market forces which have the effect of generating spontaneous 'jobs-housing balance'. In most cases, residential development (households seeking affordable housing) disperses first and industry follows. In fact, it is likely that firms' dominant locational and relocational motive is access to its labor force. A nearby labor force is thought to help firms in their recruitment and retention of workers. There is also evidence that labor morale and productivity are enhanced by shorter worktrips. Commuting economies, then, are benefits that are jointly consumed by firms and by commuters. Superimposed on this pattern is the market motive of retail and service establishments that are population-serving and must go where there is residential development.

These generalized processes occur unevenly and with time lags that are not yet well understood. Nevertheless, they lead to the conviction that there are some developmental forces in the regional economy which work in favor of jobs-housing balance and the alleviation of traffic congestion. Decentralization also removes pressures from the region's core.

Local Regulations

Traffic congestion and related infrastructure problems are most certain to arise if local policies, however well-meaning, limit spontaneous balancing. In fact, the threat of some future jobs-housing imbalance can be traced to prospective local development controls that drive a wedge between locally available labor force supply and demand, forcing longer worktrips. For example, communities that zone for a disproportionately low amount of commercial and industrial development, such as San Marino and Palos Verdes, shift their demand for jobs to other areas, causing longer commutes for residents. Conversely, business enclaves such as Commerce and Vernon, fail to provide sufficient residential zoning.

Areas for Further Discussion

This conceptual model, once refined, should allow us to discuss primary housing, employment, land use, transportation, and economic impacts associated with the three contingencies we are exploring. In the following sections, however, we have emphasized job impact meas-

ures that can be substantiated through direct tests with the Southern California Planning Model, described in the following chapters. We have complemented this discussion with a descriptive analysis of land value, housing availability, social mobility, and air quality impacts that might be associated with the contingencies.

CONSTRUCTING GROWTH CONTINGENCIES AND THEIR IMPACTS

We have approached the task of assessing the economic depression and federal budget contingencies from both a qualitative and a quantitative point of view. Our qualitative observations are based on the conceptual model of urban development outlined above. In addition, our conclusions are based on a close reading of SCAG's 'Issues and Actions' white papers, discussions with staff, and available demographic and economic studies of the region.

Our quantitative observations, however, result from a systematic sensitivity analysis we performed for each contingency using the Southern California Planning Model (SCPM). SCPM facilitates post-analysis of shifts in economic activity. By measuring and understanding how the region's 1980 economic and demographic baselines would have been changed by an economic depression or federal spending cuts, we can estimate the dynamics and impacts of similar changes in the future. Analysis of economic and federal spending trends over time also contributes to our extrapolations.

Further, the results would have to be adjusted for their long-term, compounding impact on the region. A description of this method follows.

In order to test the spatial impacts of various changes in the economic environment, we developed a hybrid model that merges a standard regional input-output model with the traditional Garin-Lowry approach to spatial allocation. The merit of our approach is that we are able to trace impacts of a large number of economic contingencies on sub-a-

reas and by economic sectors.

The heart of the SCPM is a 66-sector input-output model for the SCAG region. SCAG staff developed the I/O model from a much larger national model, using local data to 'regionalize' (adapt to local economic conditions) the production coefficients. These technical coefficients can, of course, be altered to test the impact of various changes in production technology. It should be noted, however, that recent experimental work (Feldman, McClain, Palmer, 1987) indicated that, over a fifteen-year time span, final demand changes accounted for most of output growth. This justifies sensitivity tests based on final-demand perturbations, leaving the technical coefficients intact. It also suggests that demand-driven changes, which skip over the longer-term supply-side adjustments do dominate for as much as fifteen years.

The I/O model includes 'baseline' purchases by six final-demand sectors, from each of the sixty-six industrial sectors. Selected changes of these elements allowed us to test some of the suggested economic contingencies. Results of various model runs had to be aggregated to twelve economic sectors since the rest of 1980 baseline data were only available for this level of aggregation.

Our model uses a sixty-five sub-area division of the five-county area (reduced to fifty-eight areas, for reporting purposes, because of sparse data for the outlying nonurban sub-areas). Nineteen of the sixty-five sub-areas are 'centers' (see Tables A1 and A2); the remaining forty-six sub-areas are SCAG RSAs, but with the 'centers' removed. A (65 X 65) journey-to-work matrix, developed from 1980 UTPP data is a

key model ingredient. We have also created a non-work trip matrix for the same sixty-five origins and destinations. These data are from the 1976 'LARTS' survey. This matrix might be called a 'journey-to-shop' matrix.

The various inputs require substantial updating and 'fine-tuning'. In its present form, the model outputs must be interpreted with great care. We suggest that the scenarios that have been tested be read as follows: How would the 1980 distribution of jobs (by place of work and by sector of employment) and workers (by place of residence and by sector of employment) have been altered under the various alternate economic scenarios?

The effects of a realignment of federal priorities were simply tested by reducing federal government expenditures in the three defense sectors of the model, by 5% and by 10% (an almost infinite number of other variations can be tested). The impacts of an economic depression were tested by reducing all shipments to the 'capital formation' sector, by 5% and by 10%. We hypothesized that an economic depression would be felt in the investment sectors first. Other tests could have 'started' the downturn by reducing regional exports, either across-the-board and/or in selected economic sectors.

TABLE A1
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LOS ANGELES FIVE-COUNTY AREA, 1980

Center	Pop.	# of Workers	Acres	Pop./ Acre	Jobs/ Acre
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13. USC Medical/ L.A. County General	7,100	16,316	437	16.2	37.3
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19. Ontario	1,464	4,974	305	4.8	16.3
TOTAL	421,690*	821,708*	23,980	17.6	34.3

* 3.8% and 17.5% of the five-county area's totals, respectively.
sources: Computed from 1980 UTPP data.

TABLE A2
THE SPATIAL DISTRIBUTION OF EMPLOYMENT: MAJOR ACTIVITY CENTERS
LOS ANGELES FIVE-COUNTY AREA, 1980

Center	# of Workers	Gross Acres	Jobs/ Acre	Est. 24-Hr. Trip Generat. (000s)
1. L.A. Core	373,283	6,737	55.4	4,350
2. Westwood/ Bev. Hills/Cent. City	89,447	2,956	30.3	1,245
3. Hollywood	44,802	1,902	23.6	784
4. Santa Monica	37,255	1,672	22.3	563
5. Pasadena	35,911	1,419	25.3	445
6. Huntington Park	30,429	556	54.7	223
7. UCLA	30,029	607	49.5	374
8. Glendale	25,649	1,006	25.5	340
9. Mid-Wilshire	20,772	964	21.5	306
10. San Pedro	20,413	1,043	19.6	271
11. Anaheim	18,055	946	19.1	246
12. Long Beach	17,326	731	23.7	270
13. USC Medical/ L.A. County General	16,316	437	37.3	140
14. Riverside	14,166	661	21.4	177
15. Burbank	12,703	707	18.0	206
16. East Hollywood	12,383	418	29.6	155
17. East Los Angeles	10,471	593	17.7	182
18. San Bernardino	7,324	320	22.9	147
19. Ontario	4,974	305	16.3	84
TOTAL	821,708*	23,980		

* 17.5% of the five-county area's total
sources: Computed from 1980 UTPP data; centers are AZs with highest trip generation densities.

ECONOMIC DEPRESSION CONTINGENCY

The oil embargo of 1973 and the stock market crash of October 1987 are reminders that our national and regional economies have grown more interdependent. Increasingly, the prices for goods and services are set in global markets and no local economy is secure from the effects of economic and political events that may occur many thousands of miles away. When Tokyo catches cold, New York, Chicago, Los Angeles, and London, sneeze. Local control over economic destiny has declined in favor of playing in a much larger arena in a much larger game.

Even at the national scale, economies seem more fragile or more sensitive to a variety of interlocking conditions. The federal budget deficit, the foreign-currency prices of the dollar, the Federal Reserve's discount rates, and tax policies are all related to each other and to the economic well being of this and other key regions of the country. Small shifts in the interest rate ripple through the real estate industry, one of the largest in the SCAG region. The negative balance of payments increases foreign investments as the value of the dollar declines and U.S. assets are bargain priced. Mergers and takeovers, as is usual with arbitrage, wipe out and also create economic well being, depending on the side one is on. The picture presented here is one of a sensitive economy and perhaps understates claims of economic health and robustness, especially here in Southern California. We are a model of economic diversification with a substantial export sector. Our regional economic product compares favorably with some of the most successful industrialized countries in world. The diversity of our labor force and the productivity at all levels of the wage scale also

adds to our strength. As a mecca for inmigrants from Third World countries, we have been assured a very large pool of labor, at various skill levels and at comparatively low wage rates. Finally, the size of the regional economy, especially the size of net disposable income, makes the region an attractive primary market for regional products and services. We are, in many respects, a market maker.

Despite all this, it is possible to draw a scenario in which Southern California suffers a major economic depression. Such a depression could occur as a result of either intra-regional or extra-regional disruptions. Extra-regional depression causes include:

International trade controls that limit the flow of goods through this region;

A national economic slowdown would affect all of the regions, even the well-positioned and diversified SCAG region;

Intra-regional causes of an economic downturn might include:

An environmental catastrophe that significantly cripples industrial and public infrastructure;

Local economic mismanagement could compel some investors to seek other venues.

While it is difficult to project which of these triggers is on our horizon, we have tested some prototypical scenarios in order to note the spatial and sectoral employment impacts. Two variations of an across-the-board drop in capital formation were tested; many others can be studied. Each plots the effect of a crisis in investor confidence. Our suggestive scenarios start with a 5% or a 10% cut in the value of new investments in all sectors. Table 1, below, shows that the brunt of an economic depression triggered in the way we have assumed would fall on the construction and manufacturing sectors.

TABLE 1

REGION-WIDE ANNUAL EMPLOYMENT LOSSES, ECONOMIC DEPRESSION SCENARIOS
TWELVE LOCAL EMPLOYMENT SECTORS

SECTOR	Amount of Initial Across-the-Board Capital Formation Cuts -5%	-10%
Construction	20,867	41,733
Manufacturing	17,926	35,849
Transportation	2,114	4,228
Wholesale	4,093	8,186
Retail	5,618	11,236
Finance	1,028	2,056
Business Services	2,206	4,412
Entertainment	816	1,633
Professional Services	2,576	5,152
Public Administration	300	599
Agriculture	101	201
Mining	227	455
TOTAL	57,872	115,740

source: outputs of SCPM

Spatial Impacts

As already suggested the SCPM assigns all impacts to zones in the five-county region. Looking at the total job loss impacts in all of the areas (Table 2), reveals the following:

> A one-time 10% drop in across-the-board capital formation impacts employment in every one of the fifty-seven areas studied. The overall job loss was 2.4%. The 5%-drop scenario accounts for exactly half of the impacts of the larger cut and also has a region-wide impact.
>
> Two of the centers, L.A. Core and Burbank, were less heavily hit. Areas with less reliance on manufacturing and construction employment fared better. The heavily impacted sectors tended to the less centralized ones, the non-centers.

JOUTPUT, JOBS, AND CHANGE BY 5% CAPITAL FORMATION REDUCTION

AREACODE	JOUTPUT	JOBS	JDIF	AREACODE	JOUTPUT	JOBS	JDIF
1	135186	133546	1639.4	30	48176	47544	632.06
2	28901	28559	342.21	31	174957	172694	2263.3
3	6773.1	6694.4	78.735	32	30647	30198	449.28
4	2540.5	2512	28.575	33	48186	47621	565.66
5	284619	281330	3289.5	34	16583	16359	224.22
6	118978	117644	1334.1	35	123859	122223	1636.4
7	84488	83435	1052.6	36	11475	11325	150.33
8	6136.3	6066.8	69.515	37	22692	22368	324.51
9	106172	104963	1208.9	38	2326.2	2296.2	30.009
10	243448	240649	2798.7	39	9207	9082	124.94
11	262703	259790	2913.1	40	26226	25919	307.13
12	191025	188866	2159	41	30987	30683	304.56
13	178622	176484	2138.5	42	6000.5	5928.4	72.065
14	339870	336082	3787.7	43	12369	12226	142.79
15	274318	270923	3396	44	45164	44700	463.45
16	16888	16701	187.56	45	13486	13355	131.35
17	138156	136501	1655.2	46	215006	212802	2204.2
18	264532	261293	3239.7	47	11314	11197	117.37
19	206575	204064	2510.9	48	5998.1	5899	99.163
20	74669	73769	900.52	49	7102	7014.9	87.07
21	154636	152614	2021.3	50	21456	21245	211.23
22	155521	153470	2050.6	51	18554	18346	208.12
23	8971.4	8843.7	127.63	52	23420	23085	335.41
24	67061	66279	781.86	53	6670.1	6591.9	78.279
25	88791	87730	1060.2	54	6812.6	6751.8	60.804
26	139955	138258	1696.3	55	12715	12581	134.57
27	119946	118476	1470	56	4724.5	4672.7	51.773
28	112599	111056	1543	57	10755	10633	122.37
29	51745	51000	745.03	58	9230.6	9117.7	112.93

SUM(JOUTPUT) = 4839926
SUM(JOBS) = 4782054
SUM(JDIF) = 57872

JOUTPUT, JOBS, AND CHANGE BY 10% CAPITAL FORMATION REDUCTION

AREACODE	JOUTPUT	JOBS	JDIF	AREACODE	JOUTPUT	JOBS	JDIF
1	135186	131907	3278.7	30	48176	46912	1264.1
2	28901	28217	684.42	31	174957	170431	4526.5
3	6773.1	6615.7	157.47	32	30647	29749	898.56
4	2540.5	2483.4	57.15	33	48186	47055	1131.3
5	284619	278040	6579	34	16583	16134	448.45
6	118978	116310	2668.2	35	123859	120586	3272.8
7	84488	82383	2105.2	36	11475	11174	300.67
8	6136.3	5997.2	139.03	37	22692	22043	649.03
9	106172	103755	2417.7	38	2326.2	2266.2	60.018
10	243448	237850	5597.4	39	9207	8957.1	249.89
11	262703	256877	5826.3	40	26226	25612	614.27
12	191025	186707	4318	41	30987	30378	609.11
13	178622	174345	4277	42	6000.5	5856.4	144.13
14	339870	332295	7575.4	43	12369	12083	285.59
15	274318	267527	6792	44	45164	44237	926.9
16	16888	16513	375.12	45	13486	13223	262.69
17	138156	134845	3310.4	46	215006	210598	4408.4
18	264532	258053	6479.3	47	11314	11080	234.75
19	206575	201553	5021.8	48	5998.1	5799.8	198.33
20	74669	72868	1801	49	7102	6927.8	174.14
21	154636	150593	4042.6	50	21456	21034	422.47
22	155521	151419	4101.2	51	18554	18138	416.23
23	8971.4	8716.1	255.26	52	23420	22749	670.82
24	67061	65497	1563.7	53	6670.1	6513.6	156.56
25	88791	86670	2120.5	54	6812.6	6691	121.61
26	139955	136562	3392.5	55	12715	12446	269.15
27	119946	117006	2940	56	4724.5	4621	103.55
28	112599	109513	3086	57	10755	10510	244.74
29	51745	50255	1490.1	58	9230.6	9004.7	225.86

SUM(JOUTPUT) = 4839926
SUM(JOBS) = 4724183
SUM(JDIF) = 115743

Legend

Areacode - Economic Activity Area (see list following page)
Joutput - 1980 Baseline Employment
Jobs - Scenario Employment
JDif - Job Loss

IDENTIFICATION OF FIFTY-EIGHT STUDY AREAS

1. Los Padres, Ventura, Oxnard, Simi, Thousand Oaks, Fillmore, Agoura RSAs, combined;
2. Santa Clarita RSA;
3. Lancaster RSA;
4. Palmdale RSA;
5. San Gabriel Mountains and S.W. San Fernando Valley RSAs, combined;
6. Burbank RSA;
7. N.E. San Fernando Valley RSA;
8. Malibu RSA;
9. Santa Monica RSA, center removed;
10. West Coast RSA, center removed;
11. South Bay RSA;
12. Palos Verdes RSA;
13. Long Beach RSA, center removed;
14. East Central RSA, center removed;
15. Norwalk/Whittier RSA;
16. Los Angeles, CBD, parts removed;
17. Glendale RSA, center removed;
18. West San Gabriel Valley RSA;
19. East San Gabriel Valley RSA;
20. Pomona RSA;
21. West San Bernardino Valley RSA;
22. East San Bernardino Valley RSA;
23. San Bernardino Mountains RSA;
24. Buena Park RSA;
25. Fullerton RSA;
26. Anaheim RSA, center removed;
27. West Coast RSA;
28. Central Coast RSA;
29. South Coast RSA;
30. Santa Ana Canyon RSA;
31. Santa Ana RSA;
32. Mission Viejo RSA;
33. El Toro RSA;
34. Jurupa RSA;
35. Riverside RSA, center removed;
36. Perris RSA;
37. Hemet RSA;
38. Lake Elsinore RSA;
39. Banning RSA;
40. Santa Monica Center;
41. Hollywood Center;
42. East Hollywood Center;
43. UCLA Center;
44. Westwood/Century City/Beverly Hills Center;
45. Mid-Wilshire Center;
46. Los Angeles Core;
47. Long Beach Center;
48. USC Medical School Center;
49. East Los Angeles Center;
50. Huntington Park Center;
51. Glendale Center;

52. Pasadena Center;
53. San Bernardino Center;
54. Burbank Center;
55. San Pedro Center;
56. Ontario Center;
57. Anaheim Center;
58. Riverside Center.

FEDERAL BUDGET CUTS CONTINGENCY

Recent international initiatives, along with continuing domestic budgetary and political pressures, have increased the likelihood of a reduction and/or redistribution of federal defense expenditures. Southern California clearly has been a beneficiary of the current policies and budgets. It is estimated that 7-8% of regional economic activity is a direct result of the federal defense budget. California garnered $24.7 billion in defense contracts in 1987, nearly three times the amount awarded to the second-largest contract state, New York.

The growth in aerospace and high-technology industries which have been at the leading edge of industrial growth in Southern California have grown dependent on federal contracts. Many universities, think-tanks, and other research units also depend, at least in part, for support from military research and development funds. Military installations in the region have also played a significant role in a number of proximate Southern California communities.

Although the evidence is mixed, military expenditures in Southern California have not only accounted for a significant number of jobs and economic activity, but they have fueled the engine of local growth. Spin-off technologies and an expanding service sector suggest a substantial multiplier effect for defense expenditures in the region. It would follow that a reduction or redistribution of military expenditures may have ripple effects on the larger economy as well.

Should Southern California stakeholders fear a U.S. reduction in mili-

tary spending? Is the 'threat of peace' a real threat to Southern California's well-being? Are recent global repositionings and diplomatic initiatives a precursor to economic decline in this region? Will such setbacks affect the distribution of people and jobs -- and infrastructure investments in the region?

Of course, these questions are difficult to answer. Two lines of inquiry are instructive in determining how any changes in military spending could affect the Southern California economy, one of them quantitative, the other qualitative. The two approaches shed light on how and where reduced military spending might impact the economy as well as the range and magnitude of impacts to be expected.

Scenario I: Shift in Military Expenditures

On the surface, it would seem that a shift in military expenditures would hurt the region economically. But on closer analysis, that may not be the case, particularly if one analyses the global scenarios more carefully. Both the rhetoric of recent international exchanges and the main objectives of the peace movement deal almost exclusively with nuclear preparedness. Reduction of nuclear arms is viewed as the most life-enhancing step that could be taken in this area. Little, however, is being said about conventional forces and weapons. If, as some analysts say, the instinct to defend on a national basis is not likely to subside but shift from nuclear to non-nuclear, the size and configuration of future military budgets may be very different from what we might initially assume.

Two things seem possible with this in mind. First, expenditures on nuclear arms may simply be shifted to conventional arms and manpower. In fact, by some unit of measure these may require more expenditures than nuclear defense plans. Second, since large-scale nuclear weapons tend to be produced by large-scale manufacturers, and in contrast, smaller tactical weapons are often manufactured by smaller firms, there may be some redistribution within the region from the largest, generally centrally located firms to smaller and peripherally located firms.

Under this scenario, the 'peace budget' may be good news for the regional economy:

Total funds for the region are not likely to decrease and may even increase;

The shift to products requiring more labor-intensive manufacturing may increase the number of jobs per dollar spent;

Smaller defense contractors tend to have more employees relative to their size than larger companies, thus boosting jobs;

Insofar as smaller companies tend to locate more easily at the periphery, we might find a more efficient distribution of jobs in relation to people;

The resultant dispersion of jobs could shorten travel time of the affected commuters, reducing congestion in the older areas;

The shortening and redistribution of worktrips away from the core could impact favorably on air quality;

A shift in military expenditures within the region could excite the region's tendency to spread at the edges. This would reinforce the existing more gradual pattern or urbanization of the region's periphery, and would also overlap with the impulse to provide affordable housing where land is less expensive;

While this scenario may result in some loss of open space, and a more attenuated and more segregated social system, from an economic and

transportation efficiency point of view, it could be good news. In older urban areas, some relative reduction in land values, as the edges absorb more of the regional demand, may be painful to current land owners, but welcome for those who are striving to get into the market. These effects, of course, are not likely to be immediate but a change in the defense budget along these lines sustained over a long period of time may eventually yield the scenario described here.

Scenario II: Reduction in Defense-Related Expenditures in the Region

While scenario I explores a plausible chain of events resulting in redistribution of military expenditures in the region, the second scenario explores the type and magnitudes of full impact on the region's economy as a result of 5% and 10% reductions in federal defense spending on the three prominent defense sectors: 'aircraft', 'shipbuilding', 'missiles and space'. These three sectors, in turn, impact the rest of the economy. Table 3 summarizes the sectoral impacts of federal spending reductions.

TABLE 3

REGION-WIDE ANNUAL EMPLOYMENT LOSSES, DEFENSE REDUCTION SCENARIOS
TWELVE LOCAL ECONOMIC SECTORS

	Amount of Three-Sector Defense Expenditure Reductions	
SECTOR	-5%	-10%
Construction	25	50
Manufacturing	3,348	6,696
Transportation	124	248
Wholesale	122	244
Retail	301	602
Finance	79	159
Business Services	222	443
Entertainment	71	142
Professional Services	103	206
Public Administration	29	58
Agriculture	2	4
Mining	8	16
TOTAL	4,434	8,868

source: SCPM outputs

JOUTPUT JOBS. AND CHANGE BY 5% DEFENSE ORIENTED FEDERAL EXPENDITURE REDUCTION

AREACODE	JOUTPUT	JOBS	JDIF	AREACODE	JOUTPUT	JOBS	JDIF
1	135186	135075	110 11	30	48176	48127	49 162
2	28901	28876	25 675	31	174957	174802	155 12
3	6773 1	6766 9	6 217	32	30647	30624	23 468
4	2540 5	2538 3	2 2294	33	48186	48132	54 561
5	284619	284355	264 44	34	16583	16569	13 72
6	118978	118858	120 39	35	123859	123756	102 73
7	84488	84412	76 054	36	11475	11466	9 4159
8	6136 3	6130 8	5 436	37	22692	22676	15 657
9	106172	106076	96 234	38	2326 2	2324 2	1 9967
10	243448	243251	196 03	39	9207	9199 7	7 3316
11	262703	262420	282 59	40	26226	26205	21 03
12	191025	190830	195 3	41	30987	30963	24 947
13	178622	178452	169 62	42	6000 5	5996	4 4593
14	339870	339516	353 9	43	12369	12360	8 7857
15	274318	274060	258 15	44	45164	45135	28 573
16	16888	16875	13 206	45	13486	13477	9 4856
17	138156	138036	120 24	46	215006	214822	184 61
18	264532	264290	242 63	47	11314	11305	9 6243
19	206575	206375	199 14	48	5998 1	5994 3	3 7937
20	74669	74596	73 497	49	7102	7094 7	7 2674
21	154636	154493	142 87	50	21456	21429	27 06
22	155521	155402	118 17	51	18554	18534	19 394
23	8971.4	8964 7	6 6539	52	23420	23405	15 539
24	67061	66997	64 423	53	6670 1	6665.3	4 8016
25	88791	88704	86 48	54	6812.6	6808 1	4 5368
26	139955	139830	124 92	55	12715	12703	12 45
27	119946	119838	108 37	56	4724 5	4720 5	3 9558
28	112599	112503	95 623	57	10755	10747	7 8311
29	51745	51708	37 079	58	9230.6	9223.3	7 2447

SUM(JOUTPUT) = 4839926
SUM(JOBS) = 4835492
SUM(JDIF) = 4434 2

JOUTPUT, JOBS, AND CHANGE BY 10% DEFENSE ORIENTED FEDERAL EXPENDITURE REDUCTION

AREACODE	JOUTPUT	JOBS	JDIF	AREACODE	JOUTPUT	JOBS	JDIF
1	135186	134965	220 21	30	48176	48077	98.323
2	28901	28850	51 05	31	174957	174647	310 24
3	6773.1	6760.7	12 434	32	30647	30600	46 935
4	2540.5	2536.1	4 4588	33	48186	48077	109.12
5	284619	284090	528 88	34	16583	16555	27 44
6	118978	118737	240.78	35	123859	123654	205.46
7	84488	84336	152 11	36	11475	11456	18 832
8	6136.3	6125.4	10 872	37	22692	22661	31 315
9	106172	105980	192 47	38	2326.2	2322.2	3.9934
10	243448	243055	392 05	39	9207	9192.3	14 663
11	262703	262138	565 17	40	26226	26184	42 059
12	191025	190634	390 59	41	30987	30938	49 893
13	178622	178283	339 24	42	6000.5	5991.6	8.9186
14	339870	339162	707 8	43	12369	12351	17 571
15	274318	273802	516.3	44	45164	45107	57.146
16	16888	16862	26.411	45	13486	13467	18.971
17	138156	137915	240.48	46	215006	214637	369.23
18	264532	264047	485 26	47	11314	11295	19.248
19	206575	206176	398 28	48	5998.1	5990 5	7 5873
20	74669	74523	146 99	49	7102	7087.4	14 535
21	154636	154350	285 75	50	21456	21402	54 12
22	155521	155284	236 35	51	18554	18515	38 788
23	8971.4	8958 1	13 308	52	23420	23389	31 078
24	67061	66932	128 84	53	6670.1	6660 5	9 6032
25	88791	88618	172 96	54	6812.6	6803 5	9 0736
26	139955	139705	249 84	55	12715	12691	24 9
27	119946	119729	216 74	56	4724 5	4716.6	7 9115
28	112599	112407	191 25	57	10755	10740	15 662
29	51745	51671	74 157	58	9230.6	9216 1	14 489

SUM(JOUTPUT) = 4839926
SUM(JOBS) = 4831057
SUM(JDIF) = 8868.4

Legend

Areacode - Economic Activity Area (see listing following page)
Joutput - 1980 Baseline Employment
Jobs - Scenario Employment
JDif - Job Loss

Impacts

The analysis shows that a 10% cut in the three defense-related sectors has an eventual full regional multiplier effect that results in a job loss of .18% of the area's jobs.

Whereas job losses were spread throughout the five-county area, the South Bay and Fullerton areas did sustain higher-than-average losses. The various centers (areas 39 - 57), again, were less impacted. Suburban areas, as suggested earlier, are more likely to be impacted.

PRELIMINARY

APPENDIX 8

EARTHQUAKE CONTINGENCY ANALYSIS

Submitted for inclusion in the

Southern California Association of Governments

Growth Management Plan, 1988

by

CORDOBA CORPORATION

EARTHQUAKE CONTINGENCY ANALYSIS

Introduction

A fifty percent probability exists that during the next 20 to 50 years Southern California will experience a major earthquake centered on the San Andreas fault. Potentially more damaging, the City of Los Angeles is likely to experience periodic moderate earthquakes of up to 6.0 on the Richter scale on faults which lie directly within the most highly developed areas of the City. The following analysis examines the social and economic consequences of these anticipated seismic events. In particular, this analysis explores the roles of the public and private sectors in the post-quake recovery period and forecasts a potential recovery scenario.

Physical damage to infrastructure in the region will be extensive. Highways, airports, railroads, marine facilities, communication networks, water supplies, waste disposal systems, street improvements, and utilities will be adversely affected by the quakes. A major San Andreas earthquake is expected to produce 3,000 to 15,000 fatalities, 10,000 to 50,000 injuries requiring hospitalization, and 100,000 to 200,000 homeless.

Social Impacts

Three main causes are expected to seriously damage social patterns and structures:

* Homelessness
* Unemployment
* Migration

The anticipated earthquakes are expected to cause moderate to major damage to vulnerable structures sporadically dispersed throughout the region. Damage will be more concentrated in older neighborhoods and older downtown areas than in more recently developed residential, commercial and industrial areas. High concentrations of severe damage will occur in areas of fault rupture, liquification, landslides, dam inundation, and very high shaking intensities.

A greater number of multiple-family than single-family dwellings will be uninhabitable. Therefore, the homeless population will consist of a higher proportion of renters than homeowners. The earthquake will damage older buildings at a higher rate than most new buildings because of the collapse or severe cracking of masonry walls and the failure of wood foundations and other

poorly-built or deteriorated structural components. Low-income and elderly residents will be disproportionately affected by earthquake damage because of their higher concentration in older, more vulnerable buildings.

The high percentage of expected demolition of older, damaged buildings, compounded by rent increases caused by the repair of many other residential buildings will result in the permanent loss of up to 20,000 low-income dwelling units. Mobile home damage will be far more widespread than damage to other types of residential structures. One fifth of the homeless caseload will come from mobile homes that have been shaken off of their supporting jacks or blocks. The mobile homes can be painted and re-leveled with proper equipment, but they will be vulnerable to repeated damage in even moderate aftershocks.

Damage to commercial and industrial structures will disrupt business activities and affect the employment rate following the earthquake. A prolonged loss of income to many residents will result in 11,000 households needing mortgage or rent assistance to prevent foreclosure or eviction.

A portion of the homeless population will leave the region to seek shelter elsewhere. Some of these will leave the region permanently. With respect to disasters in general, there is a disproportionate exodus of women and children. Migration is expected to be more heavily concentrated to nearby locations within Califronia and possibly neighboring states and less heavily concentrated to distant locations.

Businesses also will migrate. Some commercial and industrial owners and tenants will choose to relocate rather than re-build. Some businesses that would have moved into the region were it not for the earthquake, will choose to locate elsewhere.

Potential Mitigation Measures

After the disaster strikes, two distinct periods of relief will follow, the immediate, emergency response and the longer, rebuilding and recovery period. Pre-earthquake planning can alleviate the severity of the damage and accelerate the rebuilding and recovery process.

One group of structures of particularly high risk are mobile homes. Standards have been established to test and approve commercially available devices to brace mobile homes against earthquakes. Short of mandating earthquake-resistant installation of new units, as well as retrofitting existing ones, the following should be done:

1. Require mobile home manufacturers to offer all new buyers adequate installation systems.

2. Establish an information program to encourage the installation of seismically resistant bracing units under existing homes

3. Encourage or require insurance companies to grant rate reductions for the installation of approved devices.

Land use planning, zoning and seismic safety provisions in building codes can minimize earthquake damage. Land use planners should avoid creating new hazards or increasing damages to life and property and should attempt to reduce existing hazards. All state, regional and local planning programs and all regulatory measures governing the use and development of land and adjacent waters should include consideration of seismic and geological hazards.

Communities also may consider using innovative techniques to mitigate earthquake hazards through zoning as follows:

1. Transfer of Development Rights programs to allow a developer to transfer densities out of identified seismic hazard areas and into areas of less risk.

2. Bulk Plan Provisions can offer flexible setback standards for various buildings. If applied on all lotlines, buildings will be stepped back from the lot perimeter, equalizing building mass and reducing building failure. If applied only to the lotline fronting the street, damage to the building may be internalized within the lot, preventing the street from becoming blocked and leaving critical traffic corridors (to hospitals and fire stations) free from debris. Los Angeles already has solar access regulations that step buildings back from lotlines to maximize access to sunlight.

3. Setback standards related to building height may sufficiently separate high-rise buildings preventing them from striking each other during earthquake-induced oscillations caused by ground accelerations.

4. Open-space and conservation zones can be used to keep flood plain, landslide, active faults, and trace areas free from intensive development.

A regional emergency coordination plan should be developed to reflect the multi-jurisdictional impacts expected. The plan should include coordination of:

* medical resources
* transportation response
* route recovery management
* airspace management

* dissemination of timely information
* survival and restoration of regional communications systems
* heavy rescue and mass care services

State policy should stipulate that local governments adapt the Uniform Building Code (UBC), as revised, to require geological reports that assess the seismic stability of critical slopes developed under grading regulations. Minimum state standards should call for periodic review of the occupancy levels of structures, especially focusing on buildings considered likely to be unsafe in earthquakes, and closely coordinated with active hazardous-building abatement programs. Also, to strengthen adherence to codes, local governments can institute regular periodic review and reissuance of certificates of occupancy.

The quality of local building regulation enforcement varies widely and, at present, no significant effort is being made to universally enforce minimum standards of effectiveness. Low pay, under staffing and lack of support by top management and elected officials contribute to poor performance by many building departments.

In general, redevelopment planning helps identify areas where changes are needed. Areas selected for redevelopment should include old reinforced masonry buildings which may sustain heavy damage in an earthquake. Redevelopment plans can provide an excellent starting point for preparing reconstruction plans.

Opportunities for changes in land use after an earthquake are likely to arise if concentrated damage occurs in any area planned for land use change. The rebuilding process can accelerate existing land use trends in areas with a healthy economy. Rebuilding also could be valuable in revitalizing declining areas.

Resources Required to Mitigate Damage

The Federal Emergency Management Agency (FEMA) administers disaster relief funds that play a crucial role in redevelopment and earthquake recovery actions. Seven problems involving federal disaster relief funds have been identified:

1. Lack of specific federal authorization and funding for redevelopment projects;

2. Lack of federal requirements, procedures, and funding for local planning and implementation plans for long-term reconstruction;

3. Disincentives for relocating local public facilities

or repairing or reconstructing public facilities to meet improved standards not in force at the time of the earthquake;

4. Lack of federal guidelines for determining prices to be paid for properties to be acquired as part of a local post-earthquake redevelopment project or planned relocation;

5. Little consideration of long-term hazard mitigation in administering federal disaster assistance;

6. Lack of explicit consideration of local opportunities to achieve other federal community development objectives while administering disaster assistance; and

7. Lack of flexibility in administering disaster assistance with the potential for federal/local conflict.

Although the federal disaster relief fund guidelines contain several problems that limit post-earthquake recovery choices local governments make, it is clear that local governments still have options available for post-disaster planning and recovery. There are four key elements of post-disaster land use planning:

1. Identifying and evaluating hazardous areas that should receive particular attention in planning and post-earthquake land use changes;

2. Revising community land-use plans as needed to reflect changed conditions brought about by the earthquake;

3. Preparing specific plans for reuse or reconstruction of hazardous areas; and

4. Implementing plans for hazardous areas.

Although most of these steps generally are undertaken in post-disaster recovery, the linkages between them present special problems. To deal with the linkages, a planning strategy should be developed.

Private sector participation in earthquake recovery begins with the role of insurance and charity. The emergency response period following a disaster is characterized by substantial infusions of in-kind aid consisting of food, clothing, temporary shelters, and medical supplies. This immediate charitable response is important because it allows residents to remain in the area. Without such aid, many more residents would permanently migrate to other regions.

The speed and magnitude of insurance settlements can be instrumental in allowing property owners to retain ownership of their properties. Without a rapid response to insurance claims, many owners would have to sell their properties, probably at a loss and perhaps to outsiders. Historically, after a disaster there is an initial decrease in land values in the effected area and a simultaneous increase in land values in surrounding geographic areas. The prompt availability of insurance and loan capital can encourage reconstruction and ensure a rapid return to previous property values.

The Recovery Period

The speed and success of the recovery period is determined by four factors:

1. Availability of funds
2. Mitigation of multi-jurisdictional conflicts
3. The extent of infrastructure damage
4. The absence of serious environmental and geological problems

In Los Angeles the recovery period is expected to be relatively fast-paced, because the existing economy is one of high-growth and high economic activity. Federal disaster relief funds are expected to play an important role, followed by state and local assistance and private insurance funds. Because of the strength of the pre-disaster economy in Southern California, private lenders are likely to quickly participate in financing the reconstruction effort.

The nature of the reconstruction effort will be largely a function of the quality of pre-earthquake planning. Experiences in San Francisco and other disaster areas show a strong tendency to simply rebuild the effected area in the same land use patterns that existed before the disaster. The pressing interest of the local economy is to get back to business as quickly as possible. In the absence of a previously agreed upon plan, the pressure of time defeats efforts to redesign urban forms to solve problems in land use and transportation.

A coordinated regional recovery and reconstruction plan could reverse historical trends and seize the opportunity to respond to current and projected land use and transportation problems in Los Angeles. The key to success in this effort is maximum pre-earthquake planning and coordination. Ideally, one agency or office, such as SCAG, would take the lead in developing such a plan and coordinating participation and suggestions from both the public and private sectors.